Closing the gaps: Launch of a network-based testing toolkit to expand HIV, hepatitis, and STI testing reach

Test. Adapt. Deliver. - Webinar Series

9th July, 2025

Testing, Prevention, and Populations Unit
Global HIV, Hepatitis and STIs Programmes

World Health Organization

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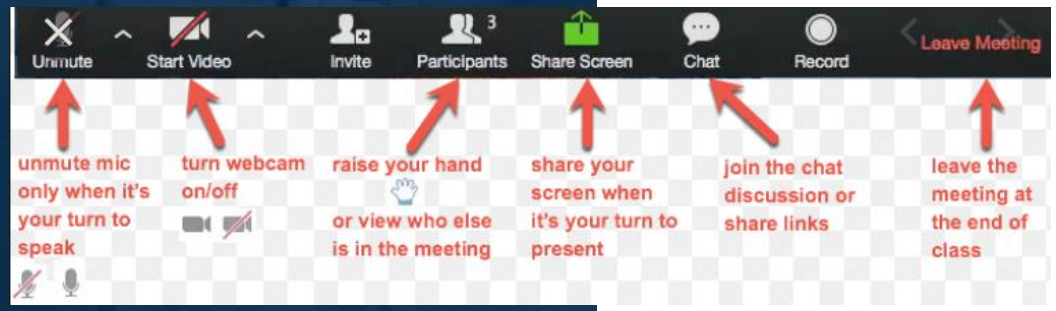
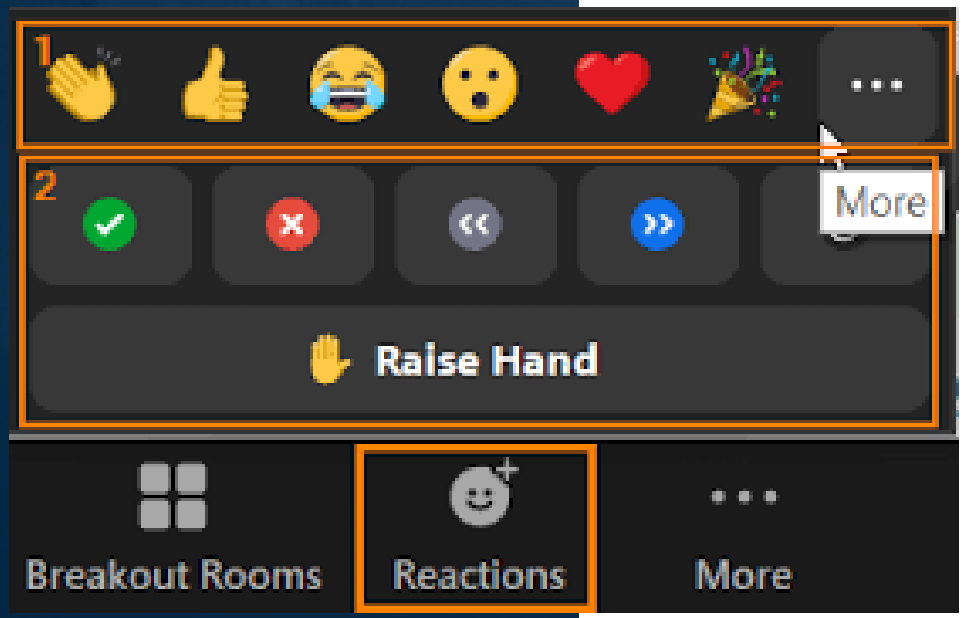
Housekeeping





Introduce yourself

- Say hi in chat and update your name (name, country and affiliation)
- We will record for note keeping and sharing content internally.
- Slides will be shared after webinar.
- Translation options in English and French—click "Interpretation"

We want to hear from you – but time is limited

- Ask questions ask in the Q&A or chat – or raise your hand
- Be concise and provide space for others to share and talk
- Stay muted and keep videos off unless presenting and speaking
- No AI bots for notetaking allowed

We are available for further follow-up

- Magdalena Barr-DiChiara: barrdichiaram@who.int
- Aliza Monroe-Wise: monroewisea@who.int

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Webinar objectives

1. **Review WHO guidance and tools for implementing NBT services in four main areas:**
   - Partner services – for HIV, HCV, and other STIs
   - Social network testing services – for HIV and other STIs
   - Family and household testing – for HIV and HBV
   - Secondary distribution of self-testing kits – for HIV, HCV, and syphilis

2. **Highlight innovative ways in which to implement different aspects of WHO NBT guidance from different countries**

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WEBINAR SERIES

TEST. ADAPT. DELIVER.
HIV Testing Services in a Shifting Landscape

Navigating change, driving innovation and delivering impact in HIV testing services and beyond.

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HIV testing services are in crisis due to funding reductions, with rapid funding shifts prompting changes and interruptions in service delivery. Ensuring testing services remain accessible is critical to sustaining HIV treatment and prevention outcomes. More than ever, evidence-based guidance is critical to the prioritization, focusing, and planning of services across countries and regions.

This webinar series presents the latest evidence-based innovations, tools, and guidance in HIV testing services. It features experts sharing global guidance, country implementation experiences, practical toolkits, and strategies for maintaining quality and access in a rapidly evolving landscape. Topics include HIV testing in pregnancy, virtual-space interventions, self-testing, network-based approaches, and testing in prevention. Whether a policymaker, implementer, or researcher, this series offers valuable insights to strengthen HIV responses worldwide.

Each session will be conducted with simultaneous interpretation in English and in French.

DATE & TIME	SESSION
May 12, 2025 12:30 pm - 2 pm CAT/CET	**Prioritizing High-Quality, Low-Cost Diagnostics to Sustain HIV Testing Services**
May 15, 2025 2 pm – 3:30 pm CAT/CET	**Elimination: Maximizing the Impact of HIV Testing for Pregnant and Postpartum Women**
June 12, 2025 2 pm – 3:30 pm CAT/CET	**Operationalizing Facility-Based HIV Self-Testing: Launch of the Implementation Toolkit and Training Modules**
June 26, 2025 2 pm – 3:30 pm CAT/CET	**Launching of Budgeting and Resource Planning Guidance for Implementing Virtual Interventions as Part of HIV Responses**
July 9, 2025 2 pm – 3:30 pm CAT/CET	**Closing the Gaps: Launch of a Network-Based Testing Toolkit to Expand HIV, Hepatitis, and STI Testing Reach**
August 7, 2025 2 pm – 3:30 pm CAT/CET	**Innovating with HIV Self-Testing for Impact in Southern Africa: Lessons Learned from the STAR (Self-Testing Africa) Initiative**
September 4, 2025 2 pm – 3:30 pm CAT/CET	**Supporting PrEP Access: HIV Self-Testing in Uptake and Scale-Up**
October 9, 2025 2 pm – 3:30 pm CAT/CET	**Advancing Testing Quality: Launch of the WHO Management System Toolkit for Non-Laboratory Settings**
November 13, 2025 2 pm – 3:30 pm CAT/CET	**Delivering HIV Testing Services in a Changing Environment: Planning, Prioritization, and Maintaining Access**

For more information about this webinar series, visit our webpage.

Connect with us!

- More WHO webinars on strategic adaptations for efficiency and savings for HIV testing
  - Next webinar is on August 7 (STAR - HIVST)
  - Register here
- WHO operational guidance:
  - https://www.who.int/tools/network-based-testing-services-toolkit-for-hiv-hepatitis-and-stis
  - https://www.who.int/publications/m/item/HQ-2025-00573
  - https://www.who.int/news/item/07-05-2025-low-cost--quality-assured-hiv-tests-to-sustain-access-to-life-saving-services
- **Need more support?** Connect with the WHO testing team: johnsonc@who.int; barrdichiaram@who.int; msimangab@who.int

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Today's programme

Time	Session	Presenter
14:00 - 14:05	Welcome & housekeeping	Magdalena Barr-DiChiara, WHO
14:05 – 14:10	Opening remarks	Olufunmilayo Lesi, WHO
14:10 – 14:20	Introduction to WHO's network-based testing toolkit & review of GAM data	Aliza Monroe-Wise, WHO
14:20 – 14:30	Impact of secondary and facility-based HIVST distribution strategies in Kenya, South Africa, and Zambia: a mathematical modeling study	Hae-Young Kim, New York University
14:30 – 14:40	Harnessing Network Dynamics: Virtual Interventions for Smarter Testing	Purvi Shah, Virtual Interventions
14:40– 15:55	HIV self-testing (HIVST) distribution through social network strategies (SNS) in Tanzania	Dr. Barbara Sage Manzi, FHI360 Epic, Tanzania
15:55– 15: 10	CFID HBV Partnership Project, Nigeria: Nasarawa Case Study	Danjuma Adda, CFID Akpan Nseabasi, Nasarawa State
15:10 – 15: 25	Q&A	Moderator: Karin Hatzold, PSI
15:25 – 15:30	Closing remarks	Marian Honu, Global Fund

Setting the scene: Introduction to network-based testing and WHO's toolkit

Aliza Monroe-Wise
HIV, Hepatitis, and STI Department
World Health Organization

1. Background: How network-based testing can fill gaps during scarcity
2. NBT policies: GAM data review
3. Introducing WHO's new network-based testing toolkit

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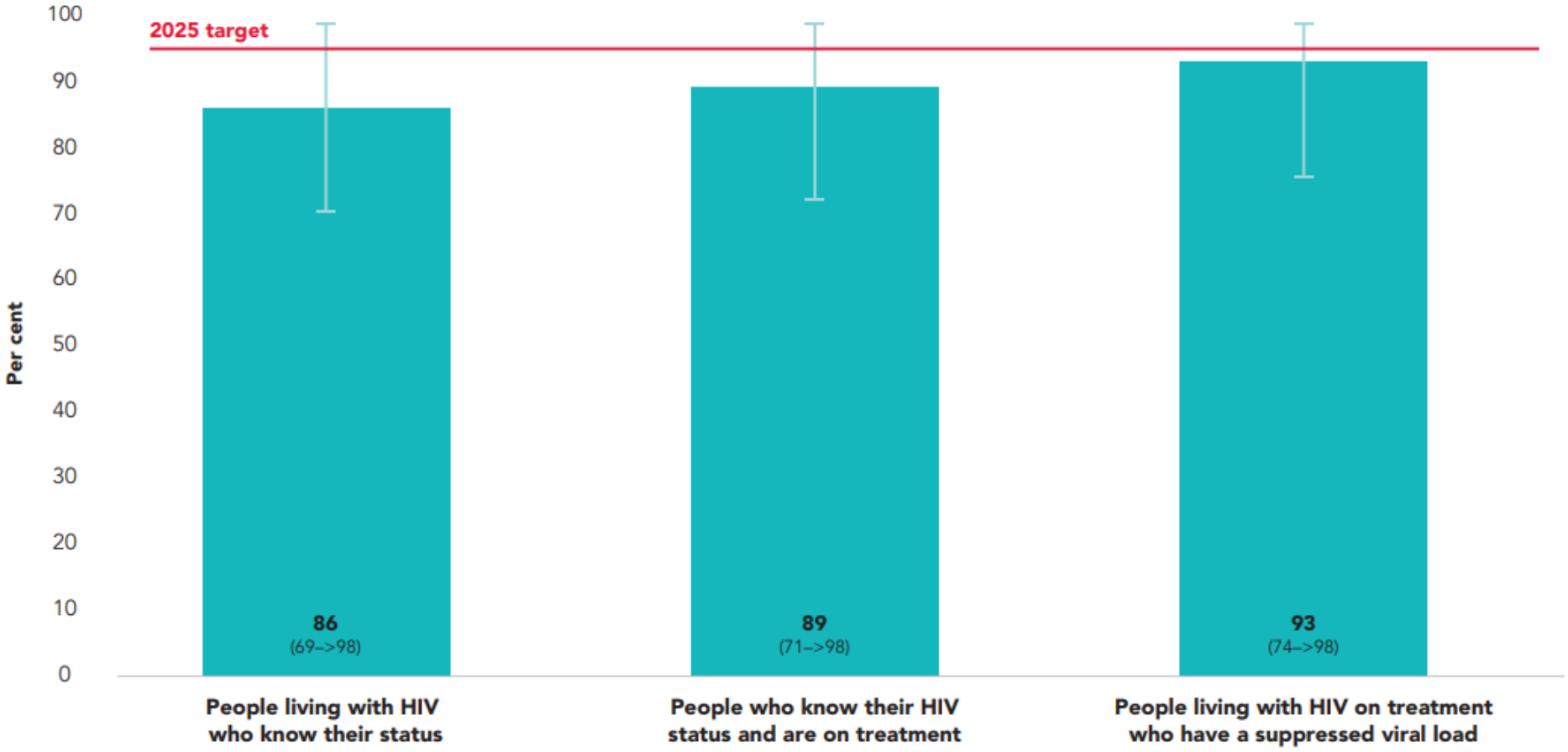
The 1st 95 goal is hardest to reach (2024)



Source: Further analysis of UNAIDS epidemiological estimates, 2024.

More testing ≠ More people with HIV identified

As we get closer (and exceed) the first 95, finding new PLHIV will become more difficult

Network-based testing = effective strategy for identifying new cases of HIV infection

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Prior to funding cuts, HRH was limited

Global health reporting has been showing challenges with growing gaps in human resources for health (HRH)

Policy shifts and reductions in funding have exacerbated these gaps

Reports indicate some HIV cadres have been frozen, unpaid or are in process of being eliminated

Multiple countries, particularly in east and southern Africa, report HIV testing is down ≥30%

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Current status of service reforms following funding cuts

- Decreased HCW time
- Decreased funding

Restrictions

Modifications

- More service integration
- More accurate case finding
- Improved efficiency

WHO guidance on prioritization of services and low-cost quality assured HIV tests:

https://www.who.int/publications/m/item/HQ-2025-00573

https://www.who.int/news/item/07-05-2025-low-cost--quality-assured-hiv-tests-to-sustain-access-to-life-saving-services

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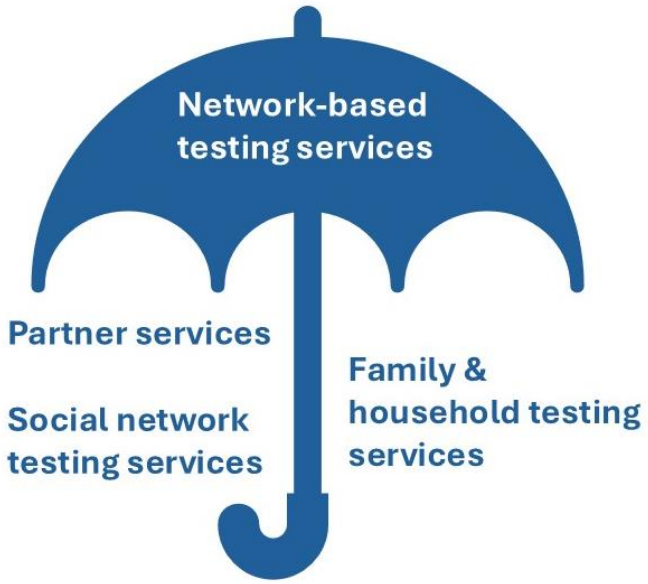
What are “network-based testing services?”



NBT must be **voluntary**: coercion, mandatory testing, or forced contact tracing are never acceptable. **Privacy** should be guaranteed, and personal information should be kept **confidential**.

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Partner services	NBT approaches in which sexual and/or injection partners of clients who have been diagnosed with an infection are contacted, notified of potential exposure, and offered testing and other services
Social network testing services	NBT approaches in which individuals living with or at risk of infections encourage and support social contacts to seek testing and other services, or distribute self-testing kits to social contacts
Family & household testing services	NBT approaches in which family members (including biological children for HIV or HBV) and other household members (for HBV) are contacted, notified of potential exposure, and offered testing and other services
Secondary distribution of self-test kits	NBT approaches in which individuals are given self-testing kits to distribute to partners or other social contacts

Partner services are highly effective

- Studies (mainly for HIV) have shown that partner services can:
  (1) Increase uptake of HTS
  (2) Identify PLHIV who were previously undiagnosed, including male partners
  (3) Effectively link to care

> J Int AIDS Soc. 2019 Jul;22 Suppl 3(Suppl Suppl 3):e25301. doi: 10.1002/jia2.25301.

Community-led HIV testing services including HIV self-testing and assisted partner notification services in Vietnam: lessons from a pilot study in a concentrated epidemic setting

Van Thi Thuy Nguyen [1], Huong Tt Phan [2], Masaya Kato [1], Quang-Thong Nguyen [3], Kim A Le Ai [4], Son H Vo [2], Duong C Thanh [5], Rachel C Baggaley [6], Cheryl C Johnson [6 7]

Affiliations + expand

PMID: 31321903 PMCID: PMC6639698 DOI: 10.1002/jia2.25301

Clinical Trial > PLoS One. 2019 Mar 27;14(3):e0212762. doi: 10.1371/journal.pone.0212762. eCollection 2019.

HIV index testing to improve HIV positivity rate and linkage to care and treatment of sexual partners, adolescents and children of PLHIV in Lesotho

Makhahliso Jubilee [1], Faith Jiyeong Park [2], Knowledge Chipango [1], Kenoakae Pule [1], Albert Machinda [1], Noah Taruberekera [2]

Affiliations + expand

PMID: 30917167 PMCID: PMC6436679 DOI: 10.1371/journal.pone.0212762

> J Int AIDS Soc. 2020 Jun;23 Suppl 2(Suppl 2):e25520. doi: 10.1002/jia2.25520.

Index and targeted community-based testing to optimize HIV case finding and ART linkage among men in Zambia

Linah K Mwango [# 1], Kristen A Stafford [# 2 3 4], Natalia C Blanco [2 3], Marie-Claude Lavoie [2 3], Morley Mujansi [1], Nasho Nyirongo [1], Kalima Tembo [1], Henry Sakala [1], Julian Chipukuma [1], Beauty Phiri [1], Carol Nzangwa [1], Susan Mwandila [1], Kennedy C Nkwemu [5], Ahmed Saadani [5], Annie Mwila [5], Michael E Herce [6 7], Cassidy W Claassen [1 2 3]

Affiliations + expand

PMID: 32589360 PMCID: PMC7319128 DOI: 10.1002/jia2.25520

> J Int AIDS Soc. 2019 Jul;22 Suppl 3(Suppl Suppl 3):e25321. doi: 10.1002/jia2.25321.

Sustained high HIV case-finding through index testing and partner notification services: experiences from three provinces in Zimbabwe

Nyikadzino Mahachi [1], Auxilia Muchedzi [1], Taurayi A Tafuma [1], Peter Mawora [1], Liz Kariuki [2], Bazghina-Werq Semo [3], Moses H Bateganya [4], Tendai Nyagura [5], Getrude Ncube [6], Mike B Merrigan [3], Otto N Chabikuli [4], Mulamuli Mpofu [2]

Affiliations + expand

PMID: 31321918 PMCID: PMC6639671 DOI: 10.1002/jia2.25321

> J Acquir Immune Defic Syndr. 2020 Dec 15;85(5):535-542. doi: 10.1097/QAI.0000000000002500.

Home- and Clinic-Based Pediatric HIV Index Case Testing in Kenya: Uptake, HIV Prevalence, Linkage to Care, and Missed Opportunities

Cyrus Mugo [1 2], Jiayu Wang [2], Emily R Begnel [2], Irene N Njuguna [1 2], Elizabeth Maleche-Obimbo [3], Irene Inwani [4], Jennifer A Slyker [2], Grace John-Stewart [5 6], Dalton C Wamalwa [3], Anjuli D Wagner [2]

Affiliations + expand

PMID: 32932411 PMCID: PMC9383697 DOI: 10.1097/QAI.0000000000002500

Review > AIDS. 2017 Aug 24;31(13):1867-1876. doi: 10.1097/QAD.0000000000001555.

Improving HIV test uptake and case finding with assisted partner notification services

Shona Dalal [1], Cheryl Johnson, Virginia Fonner, Caitlin E Kennedy, Nandi Siegfried, Carmen Figueroa, Rachel Baggaley

Affiliations + expand

PMID: 28590326 PMCID: PMC5538304 DOI: 10.1097/QAD.0000000000001555

Free PMC article

Social network testing is highly effective

- Studies (mainly for HIV) have shown that social network testing can:
  - (1) Increase uptake of HTS
  - (2) Identify PLHIV who were previously undiagnosed
  - (3) Effectively link to care

Randomized Controlled Trial > AIDS. 2024 Nov 1;38(13):1861-1865. doi: 10.1097/QAD.0000000000003976. Epub 2024 Jul 2.

Comparison of a novel expanded social network recruitment intervention with risk network recruitment to HIV testing: locating undiagnosed cases in South Africa

Leslie D Williams [1], Alastair van Heerden [2 3], Samuel R Friedman [4], Buyisile Chibi [2], Phumlani Memela [2], Wendy Avila Rodriguez [1], Phillip Joseph [2]

Affiliations + expand

PMID: 38959096 DOI: 10.1097/QAD.0000000000003976

> Int J Environ Res Public Health. 2023 Dec 30;21(1):54. doi: 10.3390/ijerph21010054.

Pilot Testing Two Versions of a Social Network Intervention to Increase HIV Testing and Case-finding among Men in South Africa's Generalized HIV Epidemic

Leslie D Williams [1], Alastair van Heerden [2], Xolani Ntinga [2], Georgios K Nikolopoulos [3], Dimitrios Paraskevis [4], Samuel R Friedman [5]

Affiliations + expand

PMID: 38248519 PMCID: PMC10815189 DOI: 10.3390/ijerph21010054

> medRxiv [Preprint]. 2023 Nov 6:2023.11.05.23298135. doi: 10.1101/2023.11.05.23298135.

Social Network Strategies to Distribute HIV Self-testing Kits: A Global Systematic Review and Network Meta-analysis

Siyue Hu [1 2 3], Fengshi Jing [4], Chengxin Fan [3 5], Yifan Dai [1 2 3], Yewei Xie [6], Yi Zhou [7], Hang Lv [7], Xi He [8], Dan Wu [3 5 9], Joseph D Tucker [3 9], Weiming Tang [1 3]

Affiliations + expand

PMID: 37986939 PMCID: PMC10659482 DOI: 10.1101/2023.11.05.23298135

Review > J Int AIDS Soc. 2024 Jul;27(7):e26342. doi: 10.1002/jia2.26342.

Social network strategies to distribute HIV self-testing kits: a global systematic review and network meta-analysis

Siyue Hu [1 2 3], Fengshi Jing [4], Chengxin Fan [3 5], Yifan Dai [1 2 3], Yewei Xie [6], Yi Zhou [7], Hang Lv [7], Xi He [8], Dan Wu [3 5 9], Joseph D Tucker [3 9], Weiming Tang [1 3]

Affiliations + expand

PMID: 39048927 PMCID: PMC11269052 DOI: 10.1002/jia2.26342

Randomized Controlled Trial > Harm Reduct J. 2023 Nov 8;20(1):165. doi: 10.1186/s12954-023-00899-3.

Effects of a social network intervention on HIV seroconversion among people who inject drugs in Ukraine: moderation by network gender composition

John Mark Wiginton [1 2], Robert Booth [3], Laramie R Smith [1], Sajina Shakya [1], Cristina Espinosa da Silva [4 5], Thomas L Patterson [6], Eileen V Pitpitan [7 8]

Affiliations + expand

PMID: 37940947 PMCID: PMC10631017 DOI: 10.1186/s12954-023-00899-3

> J Med Internet Res. 2023 Apr 26:25:e46514. doi: 10.2196/46514.

Implementation Cascade of a Social Network-Based HIV Self-testing Approach for Men Who Have Sex With Men: Cross-sectional Study

Tsz Ho Kwan [1 2], Denise Pui Chung Chan [1], Samuel Yeung-Shan Wong [2], Shui Shan Lee [1]

Affiliations + expand

PMID: 37099364 PMCID: PMC10173037 DOI: 10.2196/46514

Family/Household testing is highly effective

- Studies have shown that family and household testing can:
  (1) Identifying children living with HIV and save lives
  (2) Identify children, siblings, spouses, and parents living with HBV
  (3) Effectively link to care

Review › J Acquir Immune Defic Syndr. 2018 Aug 15;78 Suppl 2(Suppl 2):S88-S97. doi: 10.1097/QAI.0000000000001731.

Family Testing: An Index Case Finding Strategy to Close the Gaps in Pediatric HIV Diagnosis

Katherine R Simon [1 2], Robert J Flick [1], Maria H Kim [1 2], Rachael A Sabelli [1], Tapiwa Tembo [1], Benjamin Ryan Phelps [3], Nora E Rosenberg [4], Saeed Ahmed [1 2]

Affiliations + expand

PMID: 29994830 PMCID: PMC6047763 DOI: 10.1097/QAI.0000000000001731

› Trop Med Int Health. 2017 Aug;22(8):1021-1029. doi: 10.1111/tmi.12900. Epub 2017 Jun 20.

Index case finding facilitates identification and linkage to care of children and young persons living with HIV/AIDS in Malawi

Saeed Ahmed [1 2], Rachael A Sabelli [1], Katie Simon [1 2], Nora E Rosenberg [3], Elijah Kavuta [1], Mwelura Harawa [1], Spencer Dick [1], Frank Linzie [4], Peter N Kazembe [1 2], Maria H Kim [1 2]

Affiliations + expand

PMID: 28544728 PMCID: PMC5575466 DOI: 10.1111/tmi.12900

› J Int AIDS Soc. 2012 Feb 22;15(1):8. doi: 10.1186/1758-2652-15-8.

Family model of HIV care and treatment: a retrospective study in Kenya

Jayne Lewis Kulzer [# 1 2 3], Jeremy A Penner [# 1 4], Reson Marima [1], Patrick Oyaro [1], Arbogast O Oyanga [1], Starley B Shade [1 5], Cinthia C Blat [1 2], Lennah Nyabiage [6], Christina W Mwachari [1 7], Hellen C Muttai [8], Elizabeth A Bukusi [1], Craig R Cohen [1 2]

Affiliations + expand

PMID: 22353553 PMCID: PMC3298805 DOI: 10.1186/1758-2652-15-8

› Trop Med Int Health. 2009 Feb;14(2):204-12. doi: 10.1111/j.1365-3156.2008.02182.x.

Implementing family-focused HIV care and treatment: the first 2 years' experience of the mother-to-child transmission-plus program in Abidjan, Côte d'Ivoire

B Tonwe-Gold [1], D K Ekouevi, C A Bosse, S Toure, M Koné, R Becquet, V Leroy, P Toro, F Dabis, W M El Sadr, E J Abrams

Affiliations + expand

PMID: 19236666 PMCID: PMC2793410 DOI: 10.1111/j.1365-3156.2008.02182.x

› J Acquir Immune Defic Syndr. 2016 Dec 15;73(5):e83-e89. doi: 10.1097/QAI.0000000000001184.

Implementation and Operational Research: Active Referral of Children of HIV-Positive Adults Reveals High Prevalence of Undiagnosed HIV

Anjuli D Wagner [1], Cyrus Mugo, Irene N Njuguna, Elizabeth Maleche-Obimbo, Kenneth Sherr, Irene W Inwani, James P Hughes, Dalton C Wamalwa, Grace C John-Stewart, Jennifer A Slyker

Affiliations + expand

PMID: 27846074 PMCID: PMC5175406 DOI: 10.1097/QAI.0000000000001184

› AIDS Behav. 2021 Feb;25(2):554-561. doi: 10.1007/s10461-020-03002-0.

Outcome of HIV Testing Among Family Members of Index Cases Across 36 Facilities in Abidjan, Côte d'Ivoire

Arielle Lasry [1], Nathalie K Danho [2], Erin N Hulland [3], Annie D Diokouri [2], Marie-Huguette Kingbo [2], Nicole I L Doumatey [4], Alexandre K Ekra [4], Laurence G Ebah [2], Hoba Kouamé [5], Judith Hedje [4], Anne-Eudes Jean-Baptiste [3 6]

Affiliations + expand

PMID: 32875461 PMCID: PMC7855395 DOI: 10.1007/s10461-020-03002-0

Network-based testing services

Partner services

- Recommended for HIV & STIs (some evidence for HCV)
- Provider-assisted partner services should be encouraged as still most effective strategy
- Provide options based on client needs (partner referral, provider-assisted, expedited partner therapy*)
- Services must always be voluntary

Social network testing now for all with risk (not only key populations)

- Recommended for HIV (some evidence for HCV)
- Self-test distribution, community-led, multiple rounds
- Virtual or in-person
- No need for incentives or in-depth training

Family and household testing

- Recommended for HIV (children) and HBV (family and household members)
- Offer prevention services-- HBV vaccination for household members who test negative, PrEP for HIV negative partners

Optimizing implementation of network-based testing	
Self-tests	Recommended for HIV, syphilis, and HCV. Can increase uptake and linkage, but can be costly
Integration	Integrate service delivery within other services (e.g. ANC) and for multiple infections (e.g. dual HIV/syphilis RDTs)
Rounds of recruitment	Evidence suggests multiple rounds increases effectiveness in case-finding
Incentives	Without incentives, uptake, positivity and 1st time testing are still high. No need for incentives
Training	Prioritize simple one-time training, as is just as effective and more practical. Can be digital.
Prevention	Offer prevention services to contacts who test negative—including PrEP, condoms, hepatitis B vaccine
Virtual networks	Can use apps or other virtual tools for partners and social network outreach

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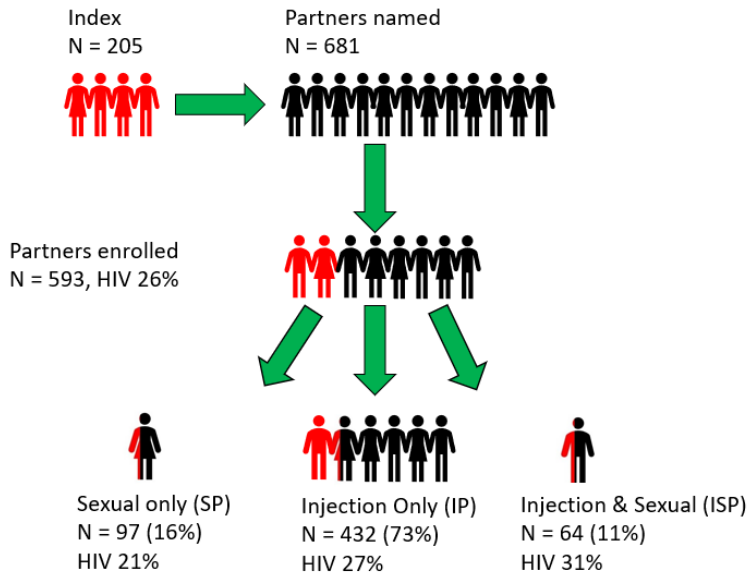
Source: Choong 2023, WHO 2024

WHO guidance on virtual interventions: https://www.who.int/publications/i/item/9789240105713
https://www.who.int/news/item/29-07-2022-who-and-unaids-support-countries-to-introduce-virtual-interventions-and-hiv-self-testing

Network-based testing in settings of reduced funding or human resources



Secondary distribution of self-tests

- Demonstrated efficacy
- ST recommended for HIV, HCV, and syphilis
- Very little HR time required

Virtual interventions

- Partner notification or social network testing through apps or text messages
- Particularly useful for certain populations (youth, KPs)
- Very cheap after up-front investment

Focused assisted partner services

- Assisted partner services very effective but time-intensive
- Focus on reaching partners of pregnant women, newly diagnosed, etc.

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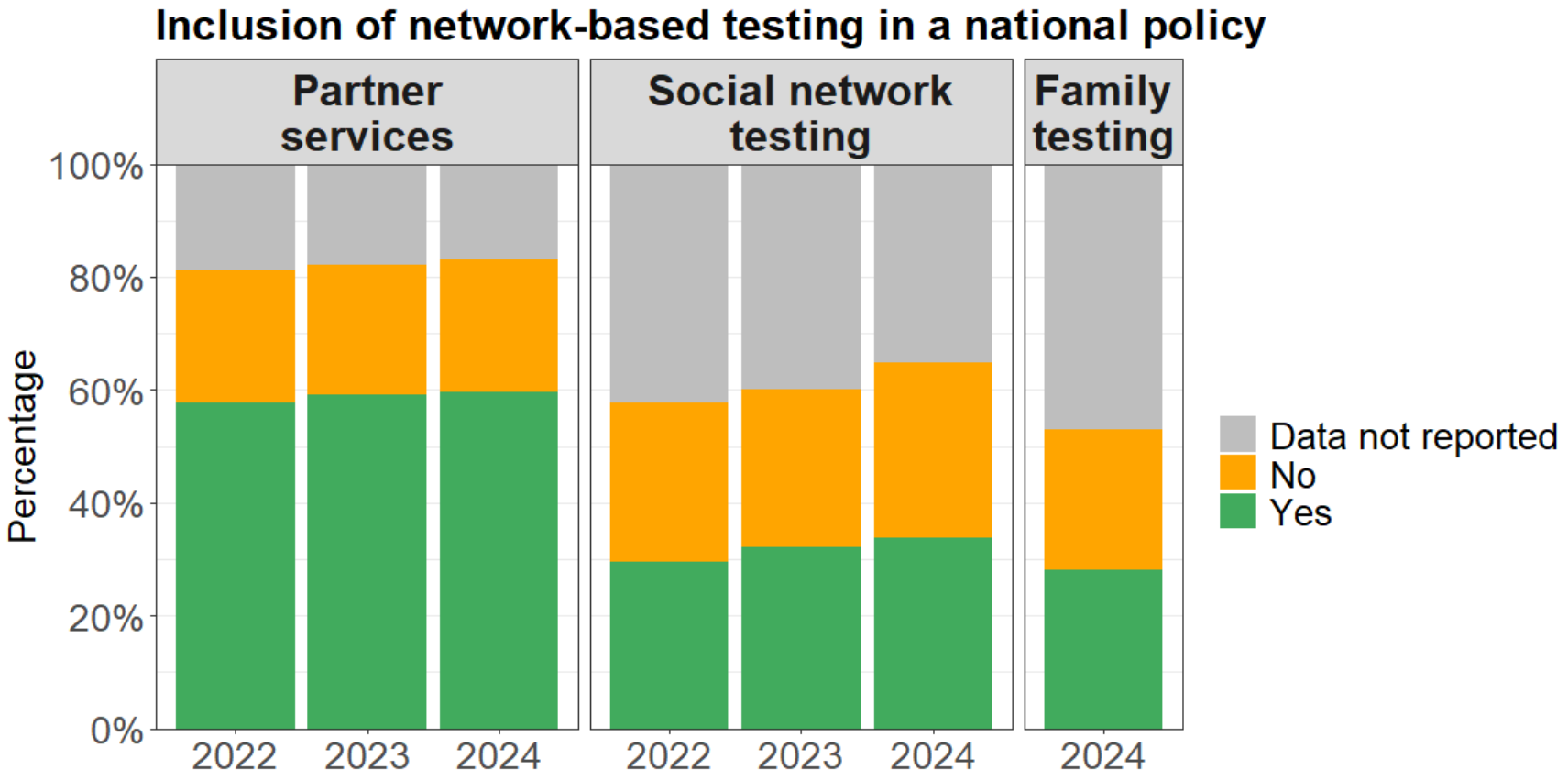
Inclusion of NBT in a national policy



Among 198 countries, inclusion in national policy increased from 113 to 117 for partner services, 58 to 66 for social network testing (2022–2024), and reached 55 for family testing by 2024.

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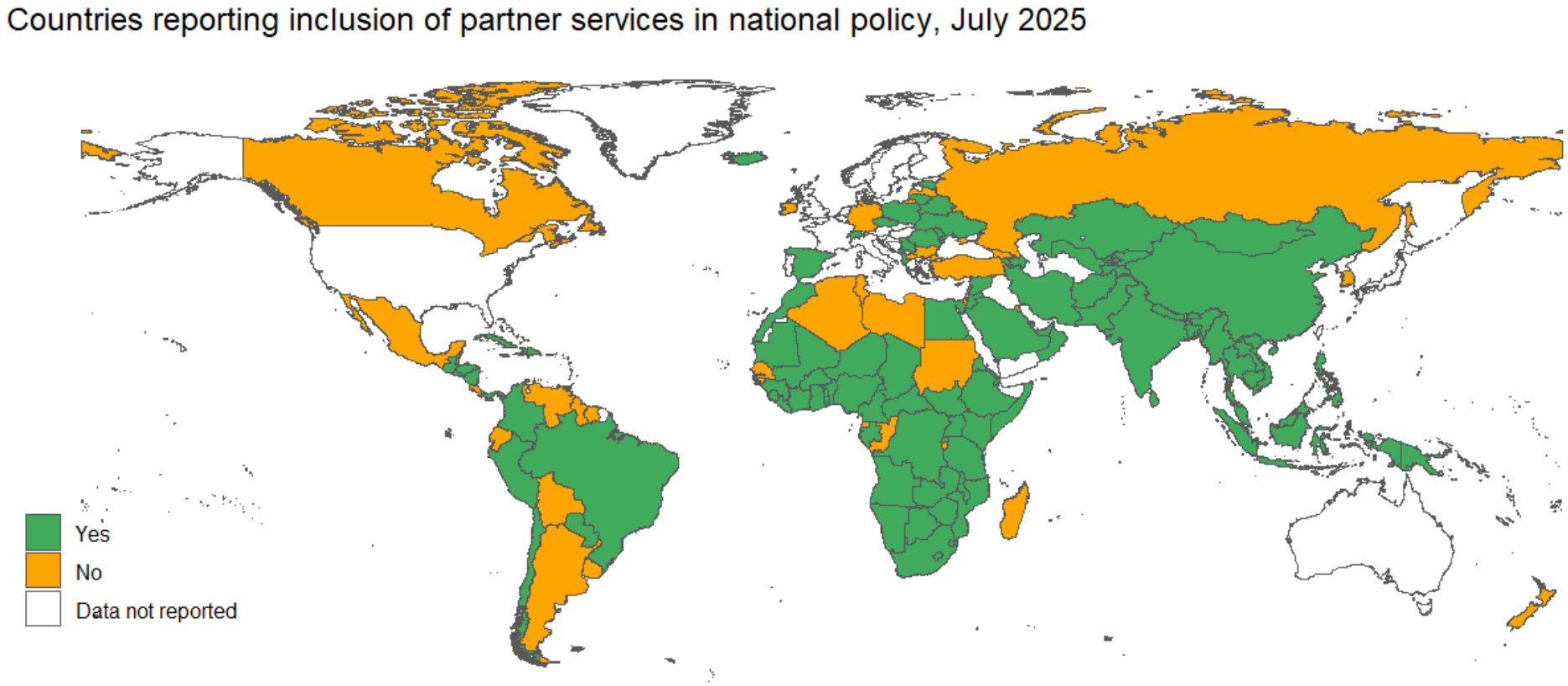
Partner services policy



Out of 198 reporting countries, 117 report the inclusion of partner services testing in national policy

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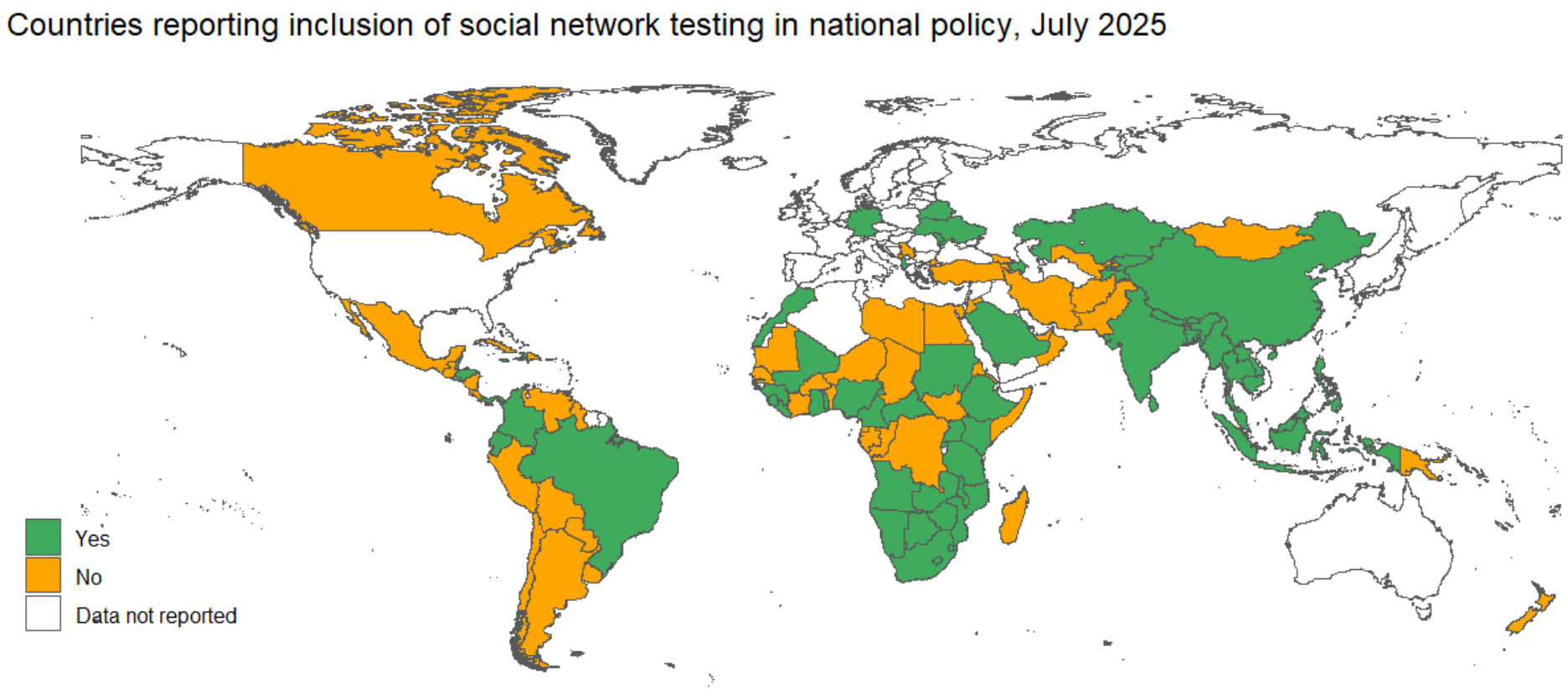
Social network testing policy



Out of 198 reporting countries, 66 report the inclusion of social network testing in national policy

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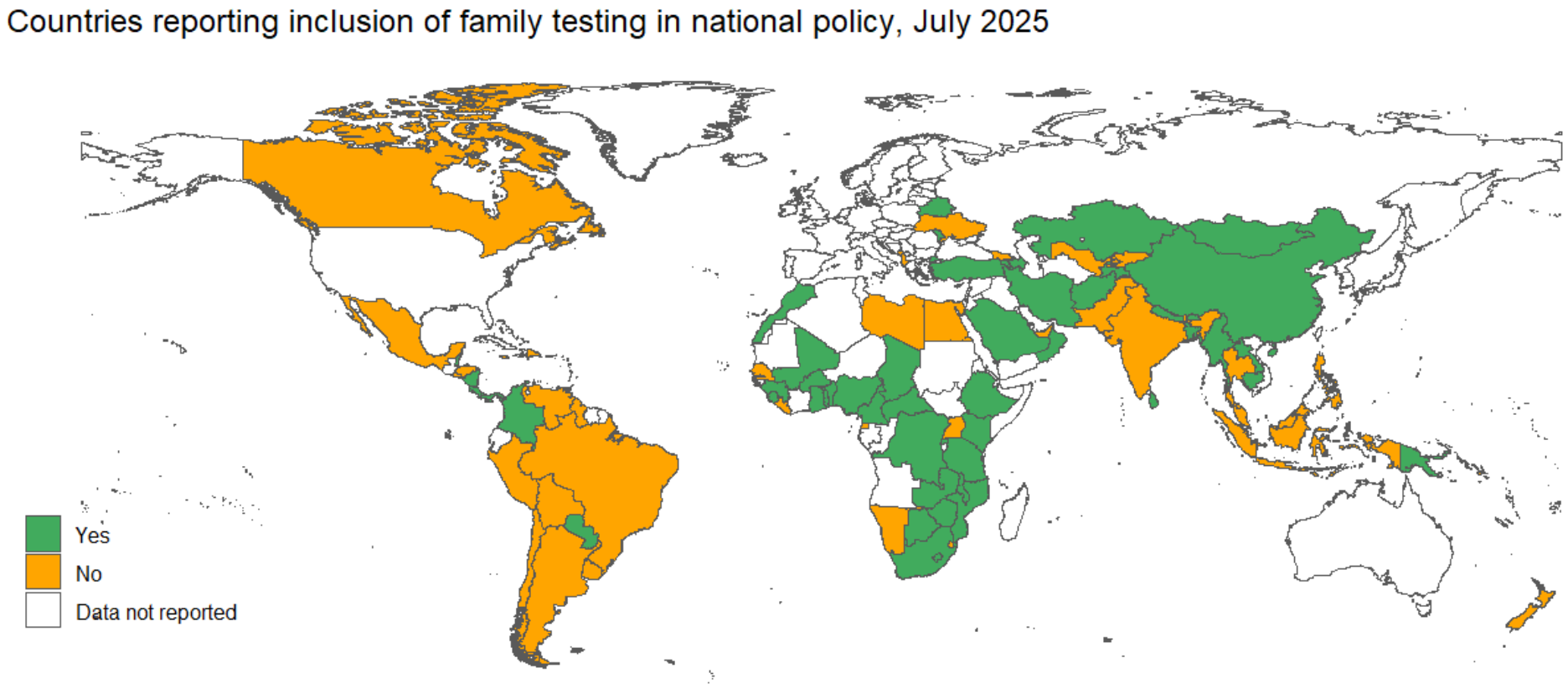
Family testing policy



Out of 198 reporting countries, 55 report the inclusion of family testing in national policy

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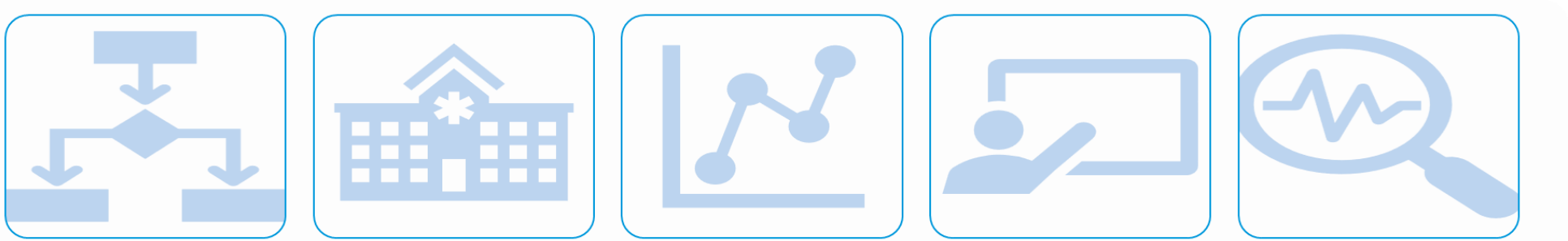
Just launched: WHO network-based testing toolkit

Network-based testing toolkit for HIV, other STIs, hepatitis B, and hepatitis C

- The toolkit provides **practical guidance, tools, and resources to support countries and programmes in implementing integrated network-based testing across HIV, hepatitis B & C, and other STIs**
- Follows **a modular framework** providing guidance and resources for the process of implementing network-based testing services including:



Planning support:

Where to start given your priority populations and country-specific factors

Implementation tools library:

Guides, scripts, resources for HCWs and programmes

M&E tools library:

Ethical data collection, registries, analysis and reporting

Training modules:

How to illicit partner information, find partners, testing, IPV screening

Evidence synopsis:

What the research shows about what works and what doesn't work for NBT

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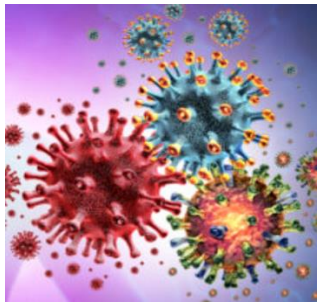
Integration as a cornerstone of NBT

There are multiple different ways that network-based testing services can be integrated:

1. Integration across infections
2. Integration across types of network-based testing
3. Integration of network-based testing within health services

1



2

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Comment on NBT services recently published in *Sexual Health:* https://pubmed.ncbi.nlm.nih.gov/40193579/

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Just launched: WHO network-based testing toolkit

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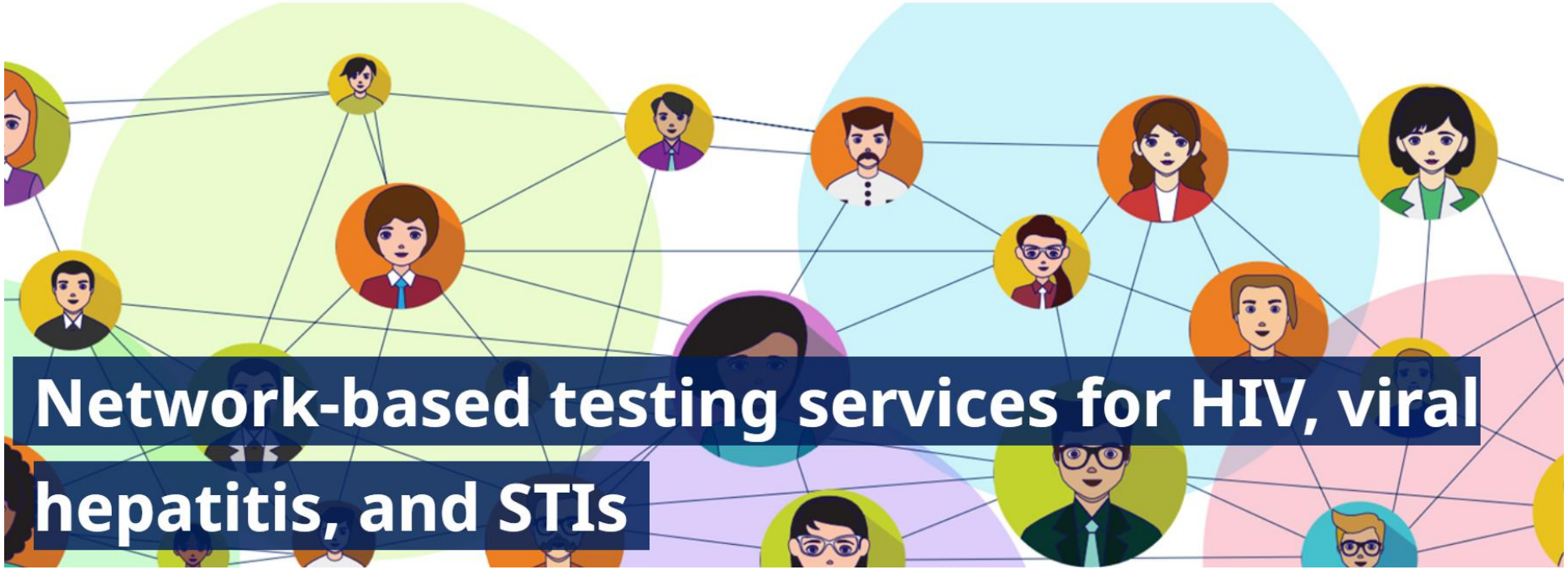


https://www.who.int/tools/network-based-testing-services-toolkit-for-hiv-hepatitis-and-stis

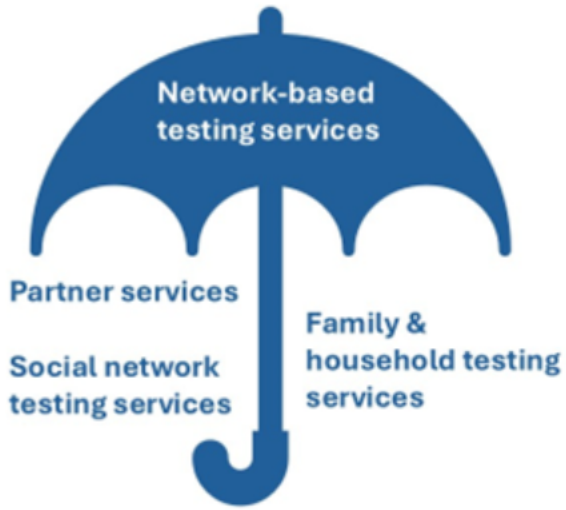
World Health Organization

Just launched: WHO network-based testing toolkit

- Planning support
- Implementation tools
- M&E tools
- Training
- Evidence synopsis

Innovative approaches are needed to identify and contact people in need of services to achieve ambitious global goals for the control of HIV, hepatitis B, hepatitis C, and other sexually transmitted infections (STIs) in the setting of funding restrictions..

Network-based testing (NBT) services include a range of service delivery modalities that broaden the reach of testing and other services by supporting individuals to disclose to, refer for testing, and/or distribute self-tests or treatment to partners, family members, and others within their social networks.



These approaches include partner services, family and household testing services and social network testing services.

NBT services can be tailored to individual contexts and settings, and can maximize impact with limited costs. For instance, secondary distribution of self-testing kits to partners and members of social networks can effectively

Key resources

13 January 2025
WHO guideline on contact tracing

19 July 2024
Consolidated guidelines on differentiated HIV testing...

30 July 2019
Family-based index case testing to identify children with HIV

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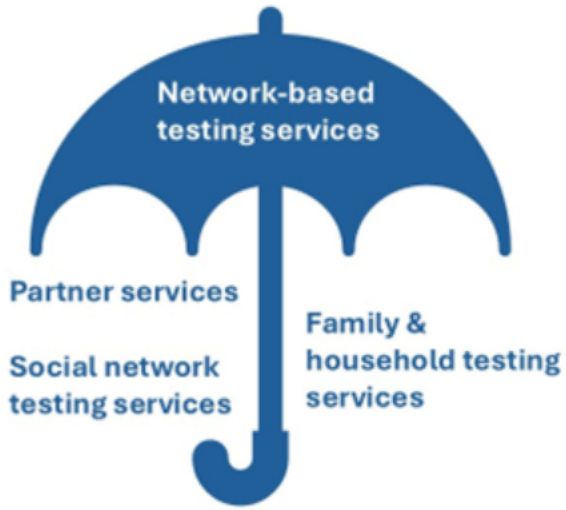

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Planning support

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How to use this toolkit

This toolkit offers resources to support the planning, implementation, and monitoring of integrated network-based testing (NBT) service delivery for people and groups who are planning to implement or who already implement and desire to improve delivery of their network-based testing services. Resources presented in this toolkit include scientific evidence, example tools, ethical guidance, and training materials. It is recommended that programmes planning NBT services:

- read through the planning considerations listed below, noting answers to key questions for the planned services;
- review the training modules in the training section to better understand how NBT should be delivered;
- create a draft NBT service delivery plan with all supporting implementation tools. Templates for implementation tools can be found in the

Case example

Assisted partner services for people who inject drugs in Kenya to identify partners living with HIV and hepatitis C
(PDF, 95 kB)

World Health Organization

Just launched: WHO network-based testing toolkit

Partner services tools

SOPs and protocols

SOPs help to guide and standardize the process of network-based testing.

Partner services SOP (MS Word, 260 kB)
(National Alliance of State and Territorial AIDS Directors (NASTAD)(

Partner services SOP (MS Word, 40 kB)
(University of Washington)

Intimate partner violence SOP
(Linkages Program, FHI360)

Guides

Guides provide direction on how to implement each step in network-based testing

STI contact tracing tool
(Australasia Society for HIV, Viral Hepatitis, and Sexual Health Medicine (ASHM))

Social network testing services tools

Guides

Guides provide direction on how to implement each step in network-based testing.

Enhanced peer outreach approach implementation guide (PDF, 1.8 Mb)

Social network coaching guide (MS Word, 25 kB)

Job aids

Job aids are quick references that providers can use when conducting social network testing.

Social network testing job aid (MS Word, 50 kB)

Family and household testing services tools

Tracking sheet

Tracking sheets can help with documenting network-based testing steps and procedures.

World Health Organization

Just launched: WHO network-based testing toolkit

‹ Network-based testing services toolkit for HIV, viral hepatitis, and STIs

Training

Planning support

Implementation tools

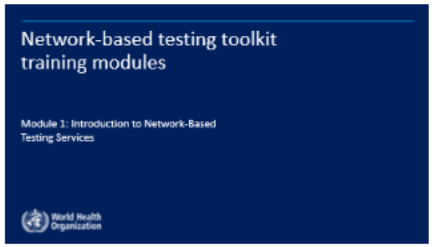
M&E tools

Evidence synopsis

Training

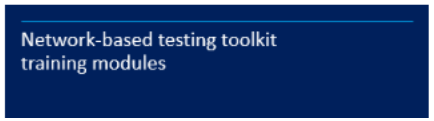
Prior to implementing a network-based testing (NBT) programme, it is important that all health-care workers and other staff involved in implementing NBT services undergo training to understand key concepts for carrying out NBT services. This section provides standard NBT modules for training health-care workers and others service providers on the importance of NBT services, and the "how-to" of NBT services for HIV, hepatitis B and C, and other STIs.

The modules in this section can be completed by individuals in a self-paced manner or can be used by programmes to train groups of people.



Module 1: Introduction. Provides definitions of NBT as well as describes the importance of conducting NBT services. Introduces concepts of ethics and consent in NBT services.

Downlaod PDF (1.7 Mb) | Download PPTX (10 Mb)



Module 2: Integrated network-based testing and self-care. Demonstrates opportunities for integrating NBT services within other testing and service delivery

World Health Organization

Take home points

- Network-based testing services are **efficient, effective** ways to reach people in need of testing and other services:
  - Partner services
  - Social network testing
  - Family and household testing
  - Secondary distribution of self-test kits
- **Integration of NBT services** allows for increased impact and efficiency:
  - Integration across HIV, hepatitis B and C, and other STIs
  - Integration across modalities of NBT services
  - Integration within other healthcare services for HIV, hepatitis B and C, and other STIs
- **Optimize implementation** of NBT services through:
  - Offer of prevention services for those who test negative
  - Use of self-test kits
  - Use of virtual interventions
  - Training of HCWs to improve efficiency & impact
- **Use WHO new NBT toolkit!**
  https://www.who.int/tools/network-based-testing-services-toolkit-for-hiv-hepatitis-and-stis

World Health Organization

NYU Langone Health

Department of Population Health

Impact of different HIVST distribution strategies in Kenya, South Africa and Zambia: a mathematical modeling study

Closing the Gaps: Launch of a Network-Based Testing Toolkit to Expand HIV, hepatitis, and STI Testing Reach

July 9, 2025

Hae-Young Kim, PhD
Assistant Professor
New York University Grossman School of Medicine

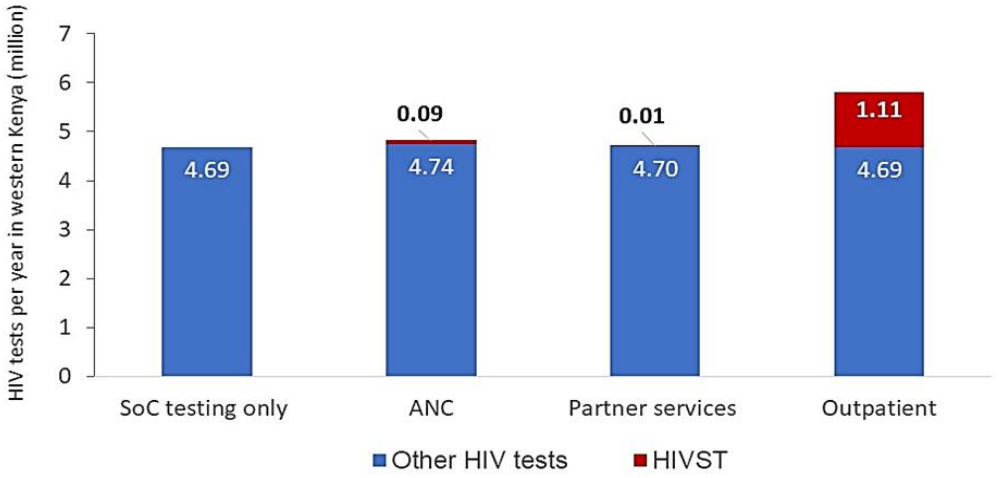
HIV self-testing to close the testing gap

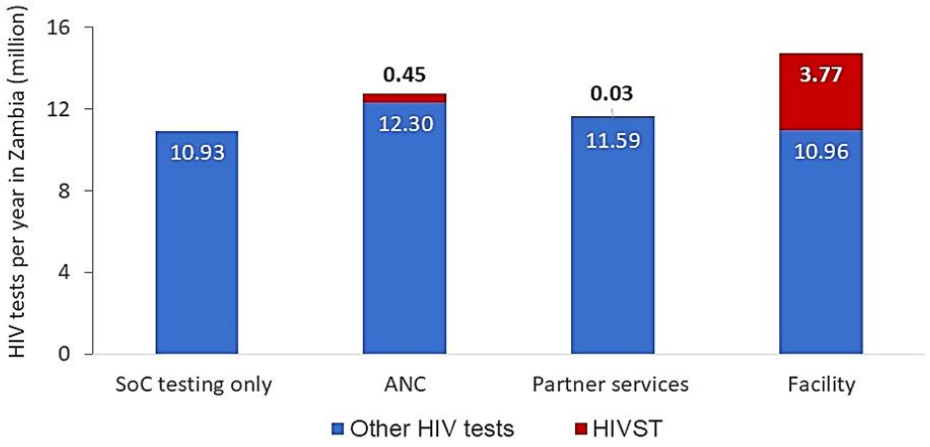
- HIV self-testing (HIVST) has emerged as an innovative strategy to reduce barriers to HIV diagnosis
  - It allows individuals to test themselves in private; enhances confidentiality, reduces stigma, and potentially increases testing uptake
- As health systems face funding constraints, HIVST provides a low-cost, scalable approach to expand testing reach.
- HIVST can be delivered through diverse channels – including clinics, community outreach, and social and sexual networks.
- Evaluating the long-term epidemiological impact of different HIVST distribution strategies can be informative to guide program design and implementation.

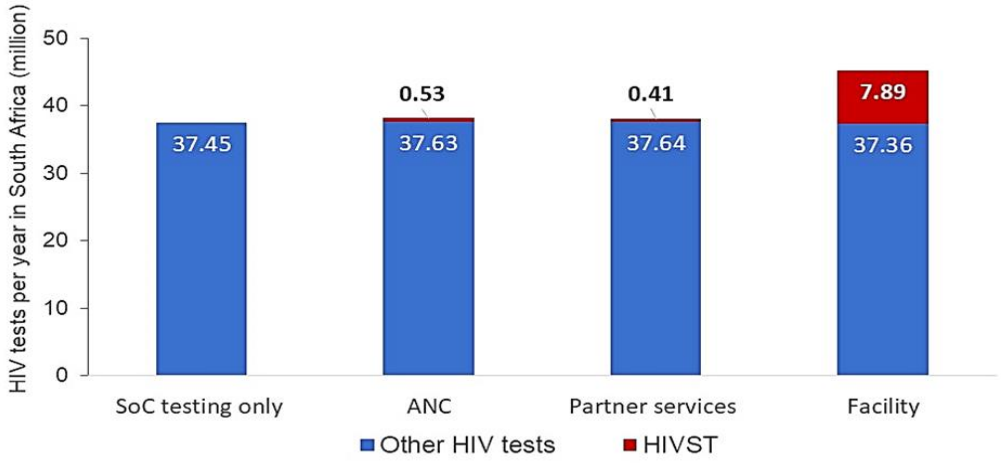
Modeling overview

- We estimated the impact of three different HIVST distribution strategies on HIV infections and HIV-related deaths in Kenya, Zambia and South Africa, using previously validated agent-based network simulation models.
- We modeled three different HIVST distribution strategies:
  - **ANC**: Secondary distribution through pregnant women at antenatal care visits to male partners
  - **Partner services**: Secondary distribution through patients newly diagnosed to their partners
  - **Facility**: Distribution at outpatient facilities
- We assumed HIVST uptake and linkage to care based on published RCTs.
  - HIVST increases HIV testing uptake by 2-3 times, compared to provider-initiated HIV testing.
- Model outcomes were projected over 30 years between 2022 and 2052.

How many HIVST are needed per year?







Across all three countries

ANC: 1.4%-3.6% of all HIV tests

Partner services: 0.3%-1.1% of all HIV tests

Facility: 17.4%-25.6% of all HIV tests

How many HIV Infections are averted over 2022-2052?

HIVST distribution strategy	Kenya		South Africa		Zambia	
Standard testing only	Ref					
ANC	12,700	6.6%	5,311	0.1%	49,036	13.8%
Partner services	20,400	10.6%	53,464	1.0%	34,302	9.5%
Facility	16,400	8.5%	90,941	1.7%	61,305	17.4%

How many HIVST to avert one infection?

HIVST distribution strategy	Kenya	South Africa	Zambia
ANC	213	3012	277
Partner services	27	227	26
Facility	2037	2602	1845

Discussion

- In Kenya and Zambia, secondary distribution of HIVST via partner services is most efficient and effective
  - Requires <30 HIVST uptake to avert one additional new HIV infection or HIV-related deaths
  - Reduces new HIV infections by ~10% and HIV-related deaths by ~7%
- In South Africa, HIVST seems to have a much smaller impact on averting HIV infections and deaths.
  - This assumes that the uptake of routine HIV tests is high and the demand is met.
- The analysis does not include the usage of HIVST for PrEP dispensing or delivery yet.

Harnessing Network Dynamics:

Virtual Interventions for smarter testing

Purvi Shah
Virtual Interventions Expert
9 July 2025

Agenda

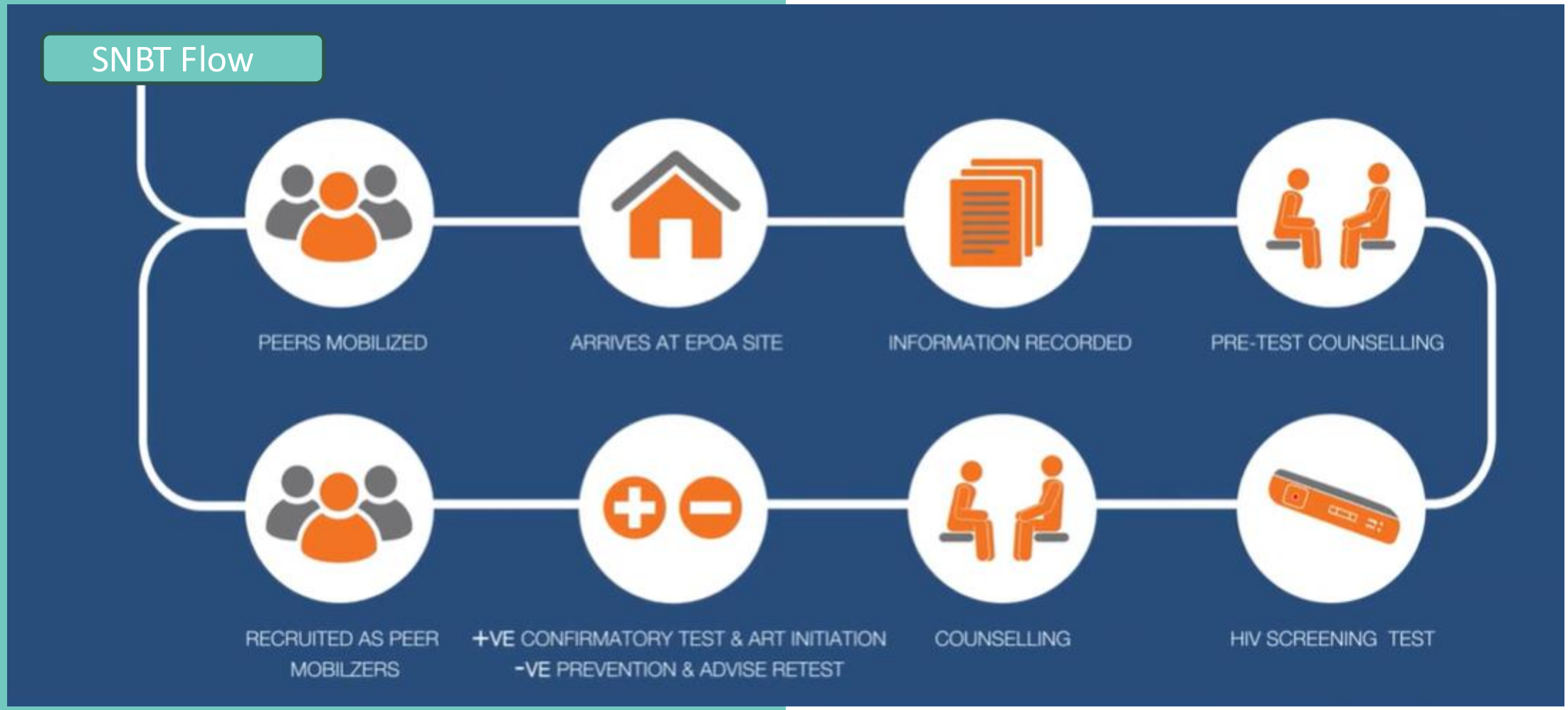
Social Network based testing

Why virtual interventions

Smarter network testing

Examples

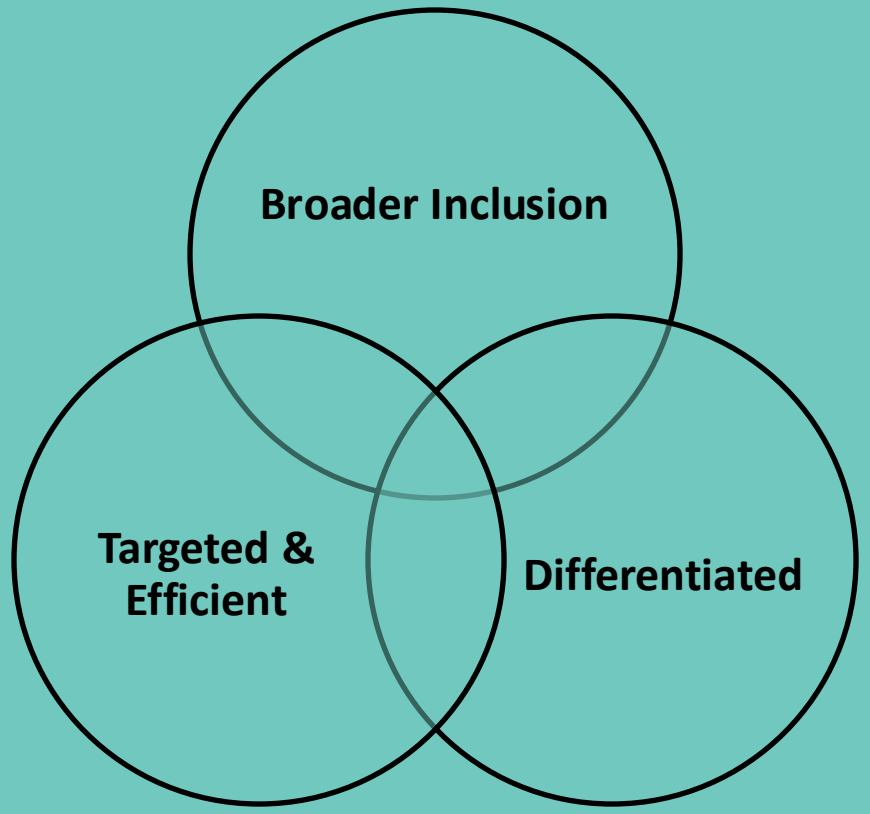
Social Network Based Testing (SNBT) - physical world



Gaps and Challenges

- Paper coupons
- Time consuming
- Physical visits to hotspots and meeting high risk seeds
- Waiting for the referred network to arrive at the testing site
- Uncomfortable to share the details of casual partners or family
- Fear of disclosing HIV status – stigma/discrimination

Why go Virtual?



BROADER INCLUSION

Harnessing online platforms to expand access to previously unreached individuals facing high risks.

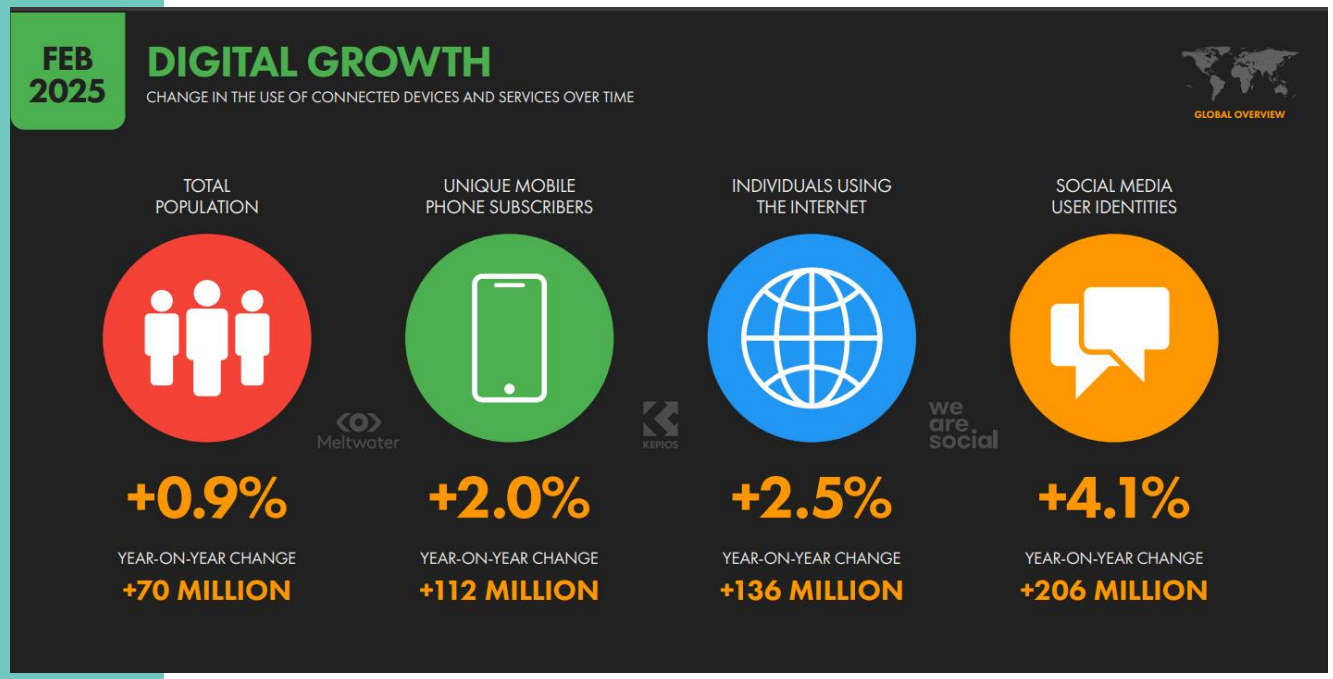
DIFFERENTIATED AND TAILORED SERVICES AND INFORMATION

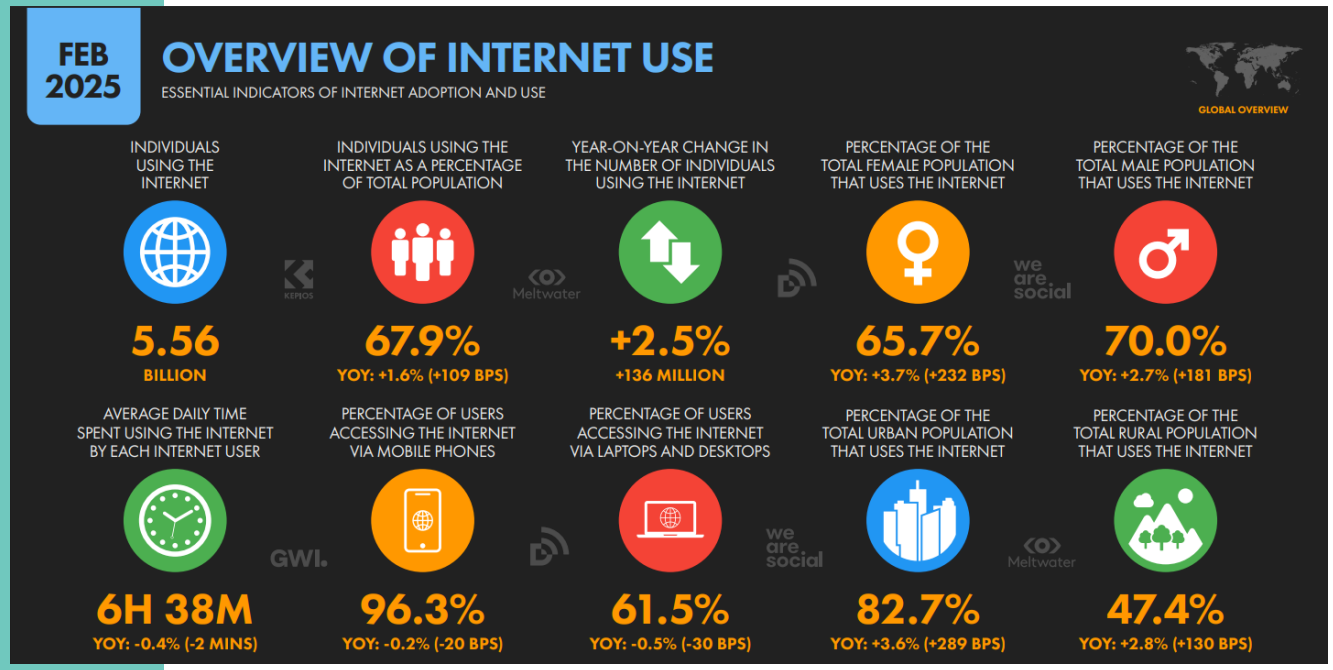
Providing of focused, prioritized, person-centered support on the basis of preferences and needs, with associated efficiency and effectiveness gains.

IMPROVED TARGETING AND EFFICIENCY

Leveraging efficiencies of virtual communication, automated systems, and rich user data to bring the right information and services to the right people.

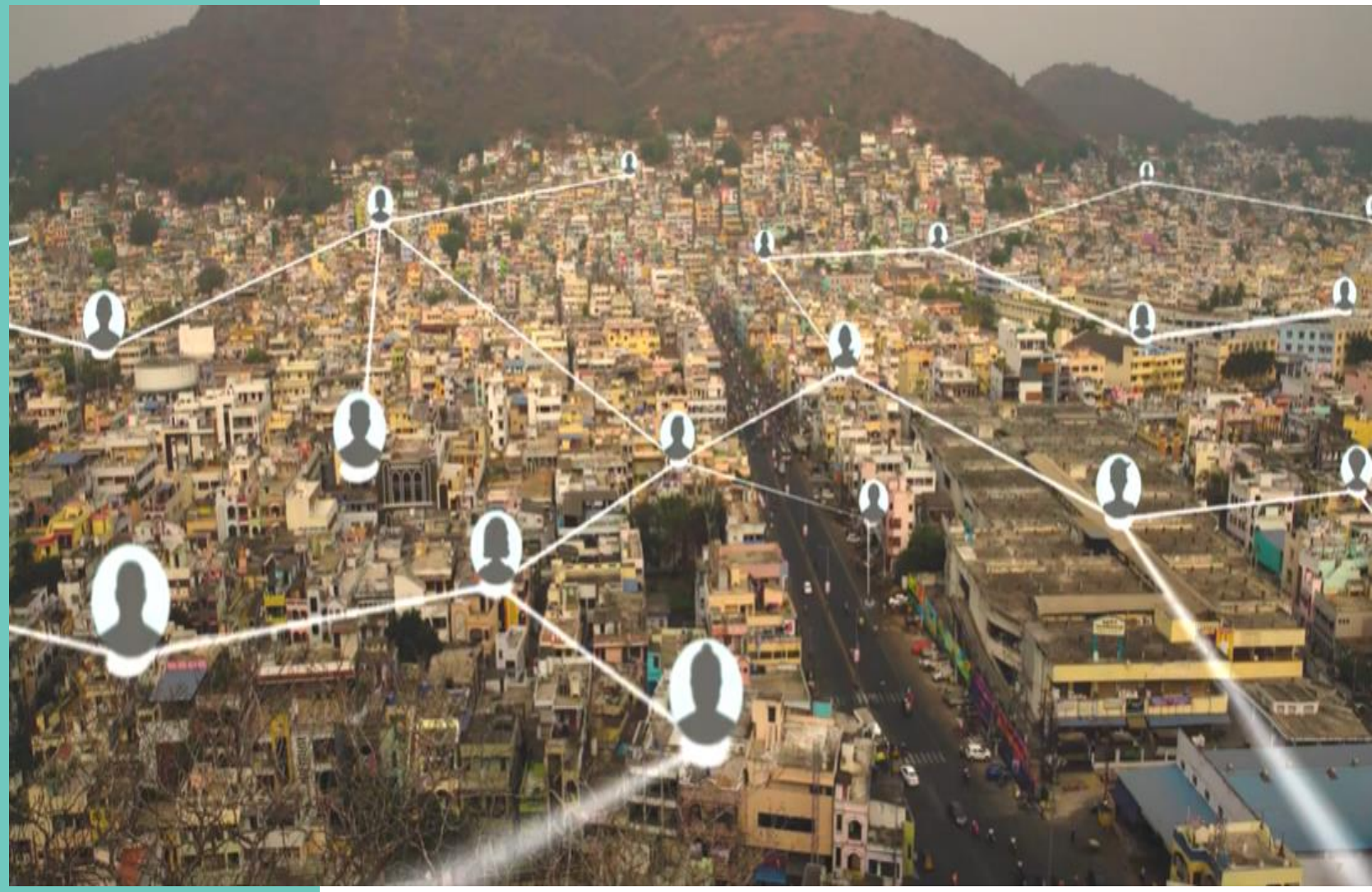
Increase in Social Media Use



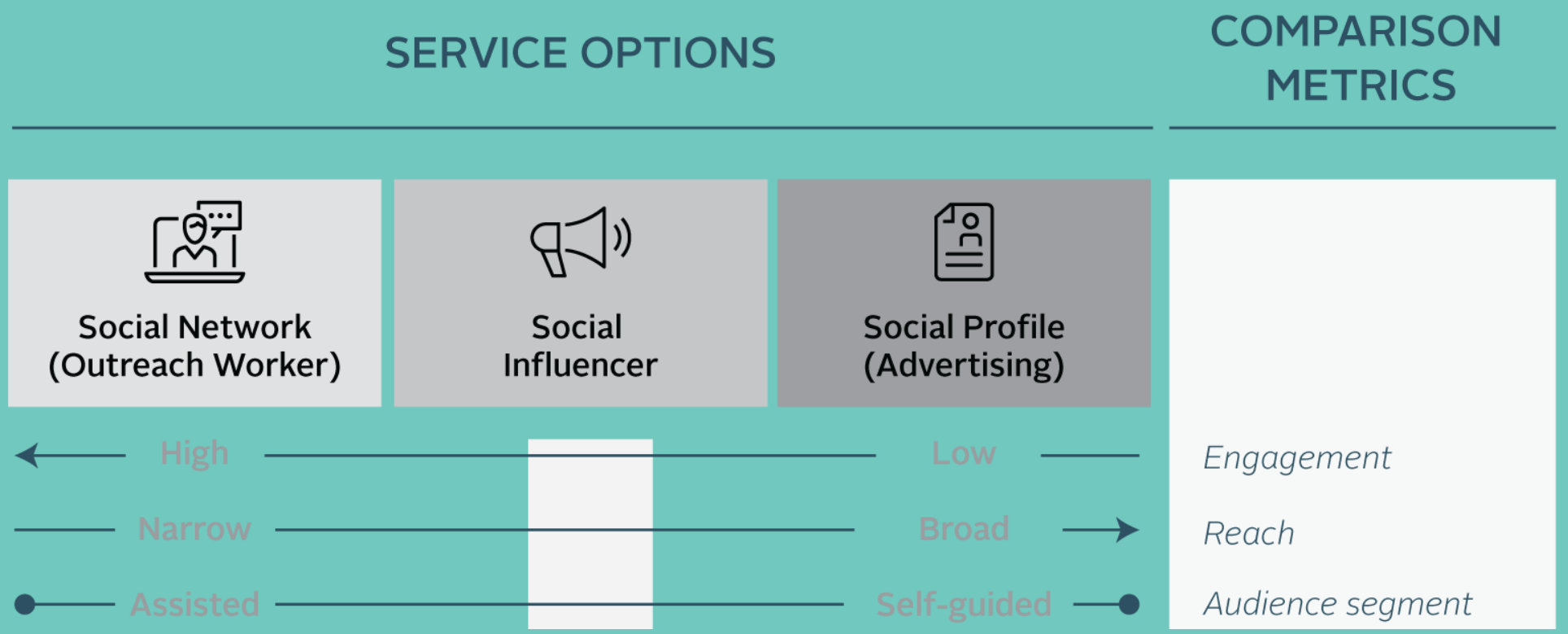


Virtual SNBT

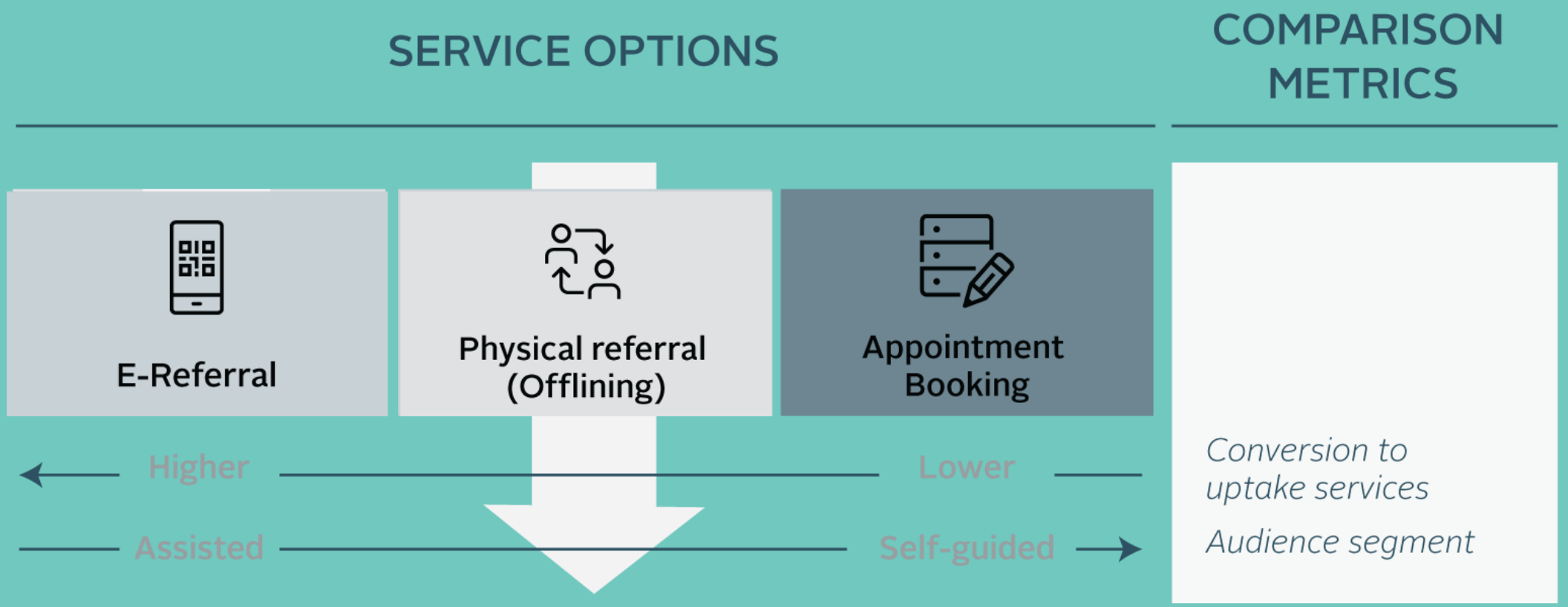
- No physical contact outreach and referral
- Smarter testing
- E coupon based
- QR code based
- One seed – multiple network referrals
- Faster and more convenient
- Digital tracking and reporting



Online outreach approaches



Linkage modalities



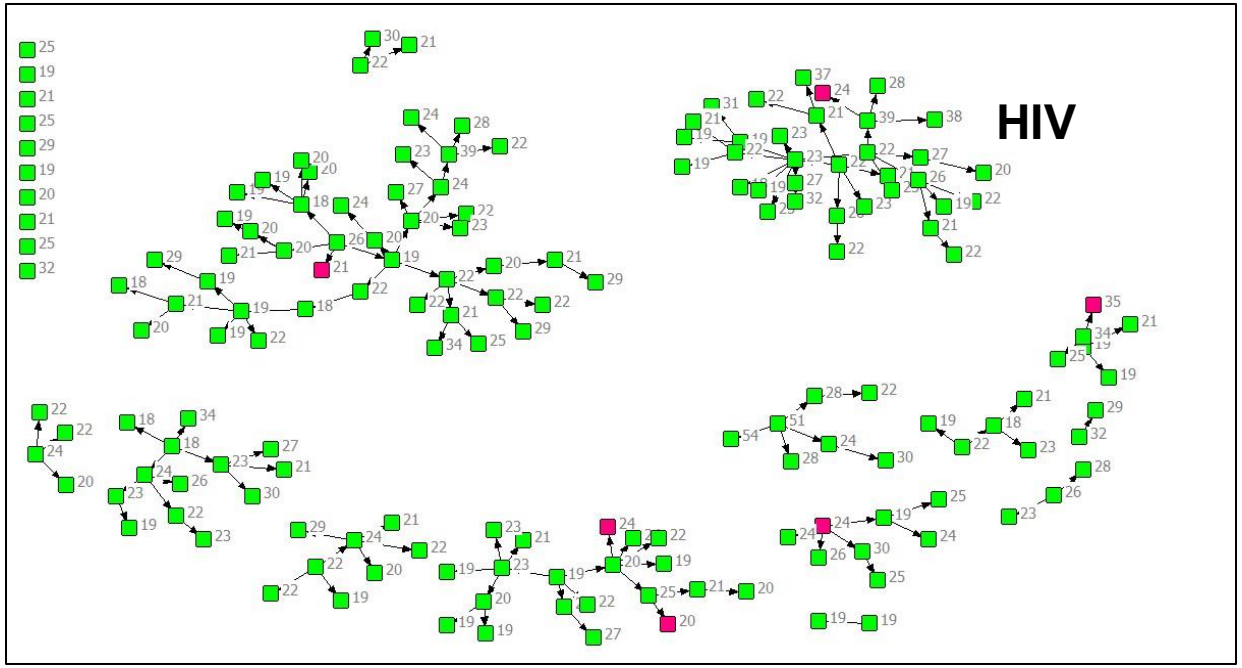
Referral Options

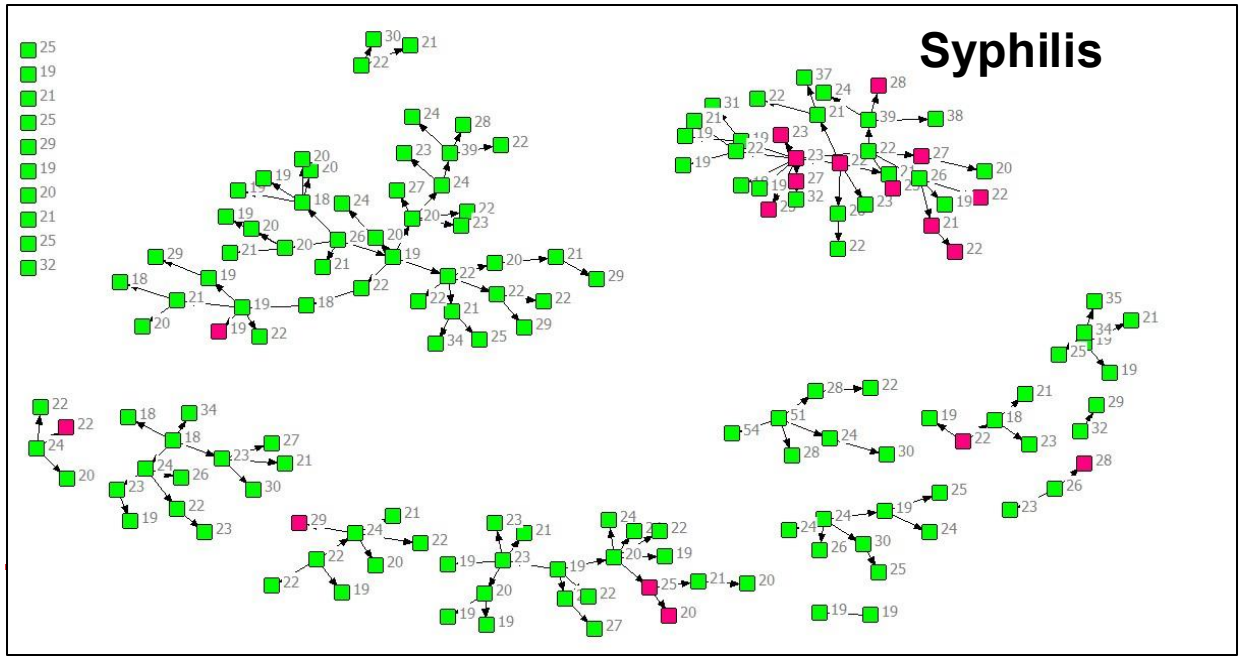
Three simple ways to manage and offer testing

1. **Provider-led:** Provider or case manager to solicit partners contact info and send SMS messages
2. **Client-led:** a pass it on link is sent to seed client to forward to partners/ social networks
3. **Anonymous SMS:** Send direct message to partners and social networks

MSM network

- Targeting hard to reach MSM operating on social media platforms and dating apps
- E – Coupons used
- Data for 1 week
  - # MSM reached through SNBT – 194 (eligibility >18 yrs and non-TI)
  - # of MSM tested for HIV and syphilis – 180
  - # of MSM HIV positive – 6 (3.3%)
  - # of MSM syphilis positive – 19 (10.5%)





Thank you

Connect with me for support on **purvs9@gmail.com**

EpiC Tanzania

HIV Self-Testing (HIVST) distribution through social network strategies (SNS)

WHO Webinar

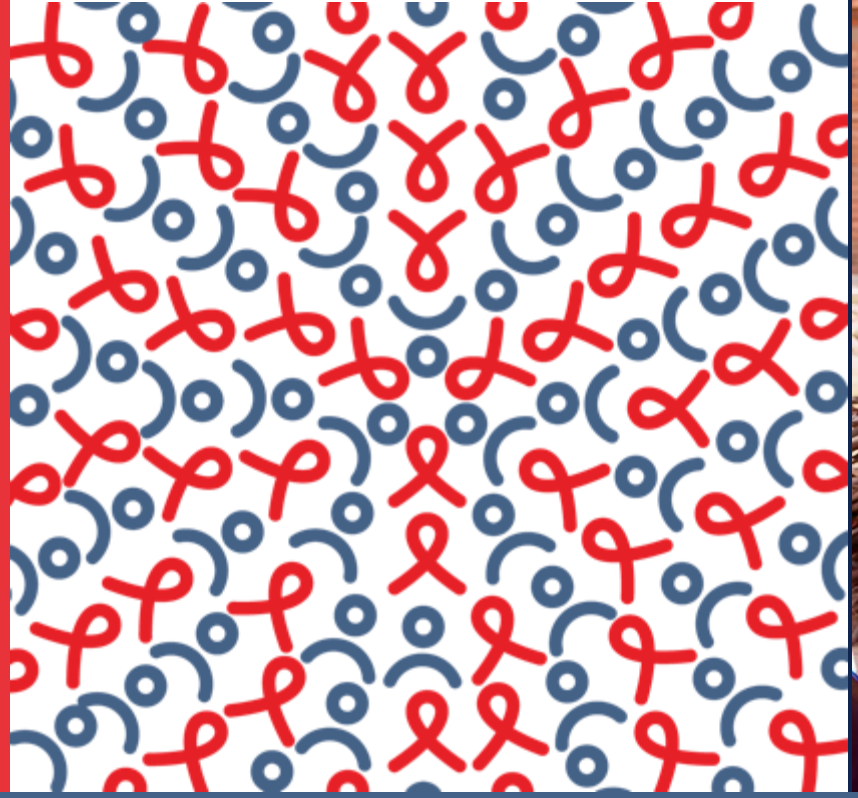
PEPFAR
U.S. President's Emergency Plan for AIDS Relief

USAID
FROM THE AMERICAN PEOPLE

EpiC
Meeting Targets and Maintaining Epidemic Control

Outline

- Overview of HIVST services in Tanzania.
- HIVST distribution by EpiC Tanzania .
- Integration of HIVST into network testing services(Index testing and social network testing).
- Data collection tools & reporting.
- Lessons Learnt and Recommendations.



Overview of HIVST Services in Tanzania

HIV Self-Testing (HIVST) in Tanzania

Pioneering HIVST

Tanzania commenced implementation of HIVST in 2021, initially utilizing oral HIVST (OraQuick) to expand HTS.

Expanding Options

In August 2024, blood-based HIVST was introduced as an additional screening option.

Screening Focus

HIVST kits are primarily used as a screening tool.

Strategic Distribution

Kits are distributed through primary (direct provision) and secondary models (sexual partners and peers) to reach underserved populations.

Eligibility

HIVST is provided to individuals aged 18 years and above.

HIVST in Tanzania ...

HIVST is distributed through **public & private points**.

Kits are available at pharmacies, government health facilities, community & via vending machines.

Mobilization and linkage for testing is through

Community outreach

Social media platforms.

HIVST Distribution- EpiC Tanzania

Community Mobilization: Kits distributed by trained mobilizers.

Dual Models: Primary & secondary (assisted/unassisted) distribution.

Support Systems: Contact info provided for secondary recipients. (mobilizers/HCPs).

HCP(Community testers and facility-based HCP)-Modalities.

Mobile Testing (accounts for ~80% of secondary distribution).	Index Testing.	Social Network Strategy (SNS) testing (EPOA & RNR).

HIVST Secondary Distribution Into SNS & Index Testing

INTEGRATION INTO INDEX TESTING & RISK NETWORK REFERRAL TESTING

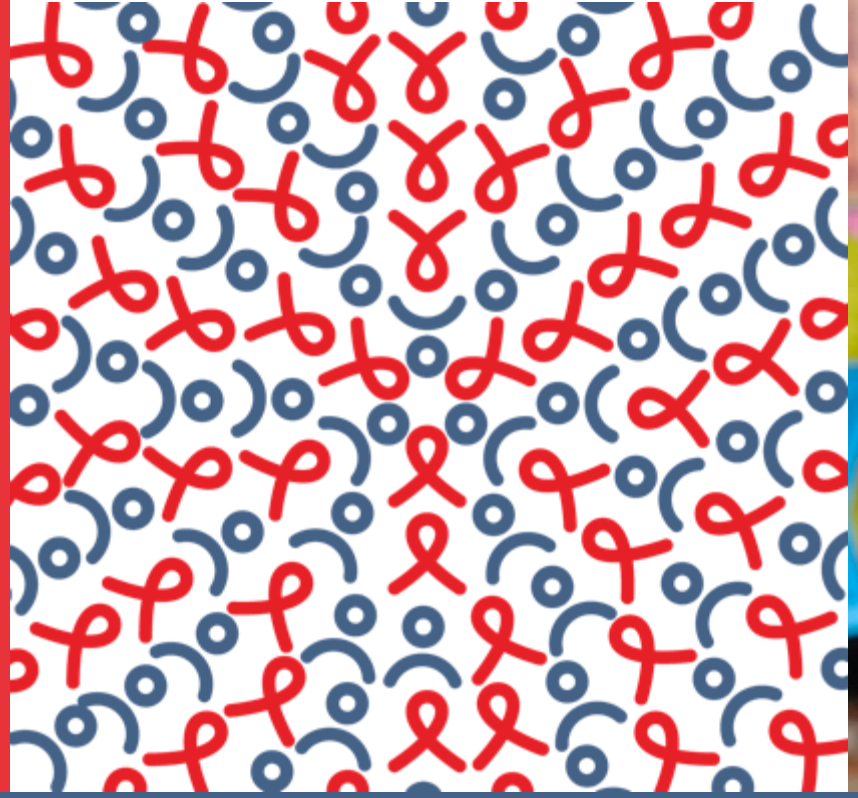
HCP supports the primary index client to:

- Elicit sexual partners
- Select a preferred partner notification method,
- Choose an HIVST option to reach and test the elicited sexual contact.
- Usually for RNR, the index contact is given HIVST for **peers/social contact.**

INTEGRATION INTO ENHANCED PEER OUTREACH APPROACH (EPOA)

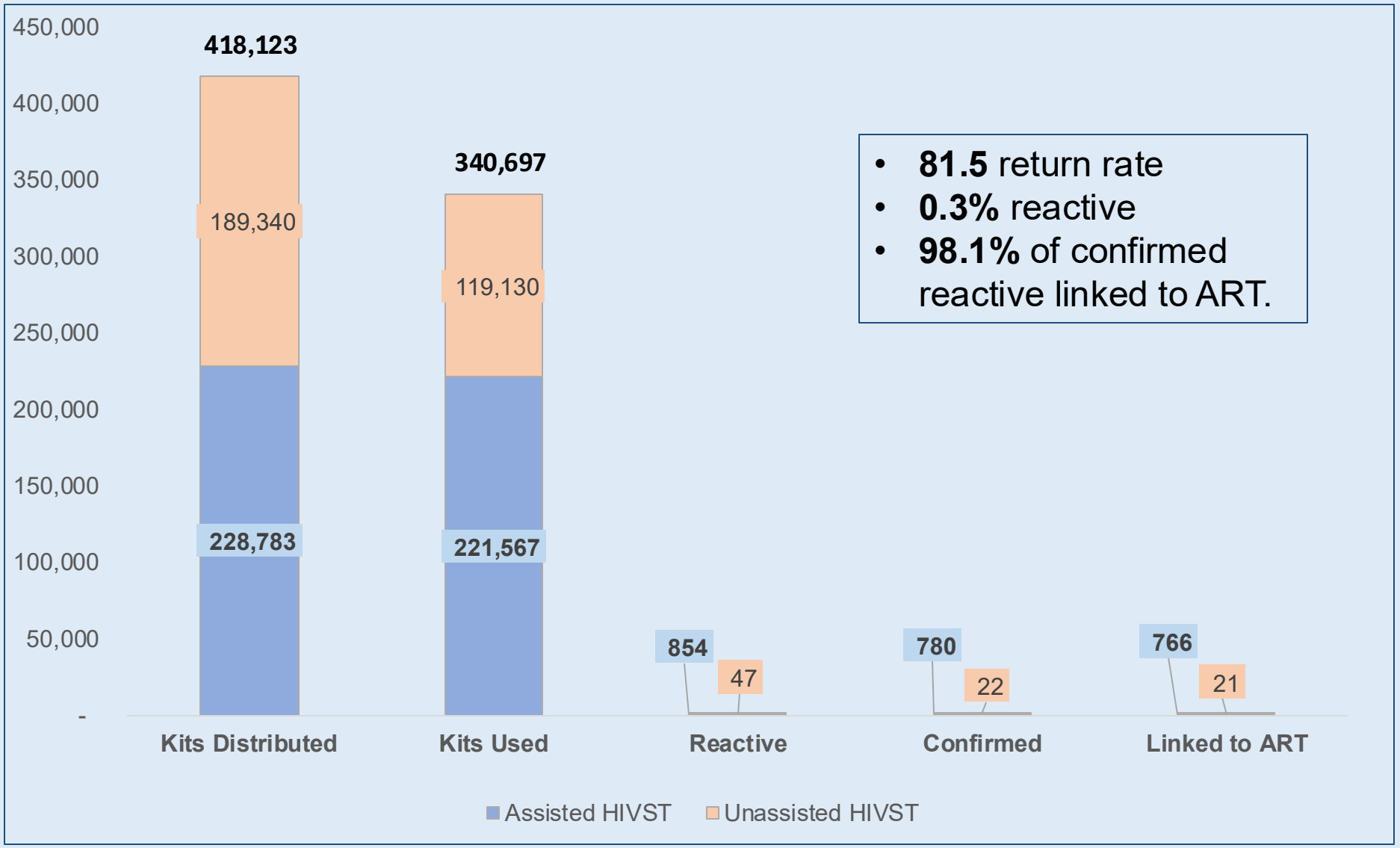
The community mobilizer:

- Issues a coupon to the client, which includes the HCP's contact number for follow-up on HIV testing services and gives the client the option to receive HIVST for their personal use.
- When a client presents the coupon to the HCP for HIV testing services, the provider ensures that the client is also given HIVST to distribute to their sexual partners & peers.



HIVST Achievements - Tanzania

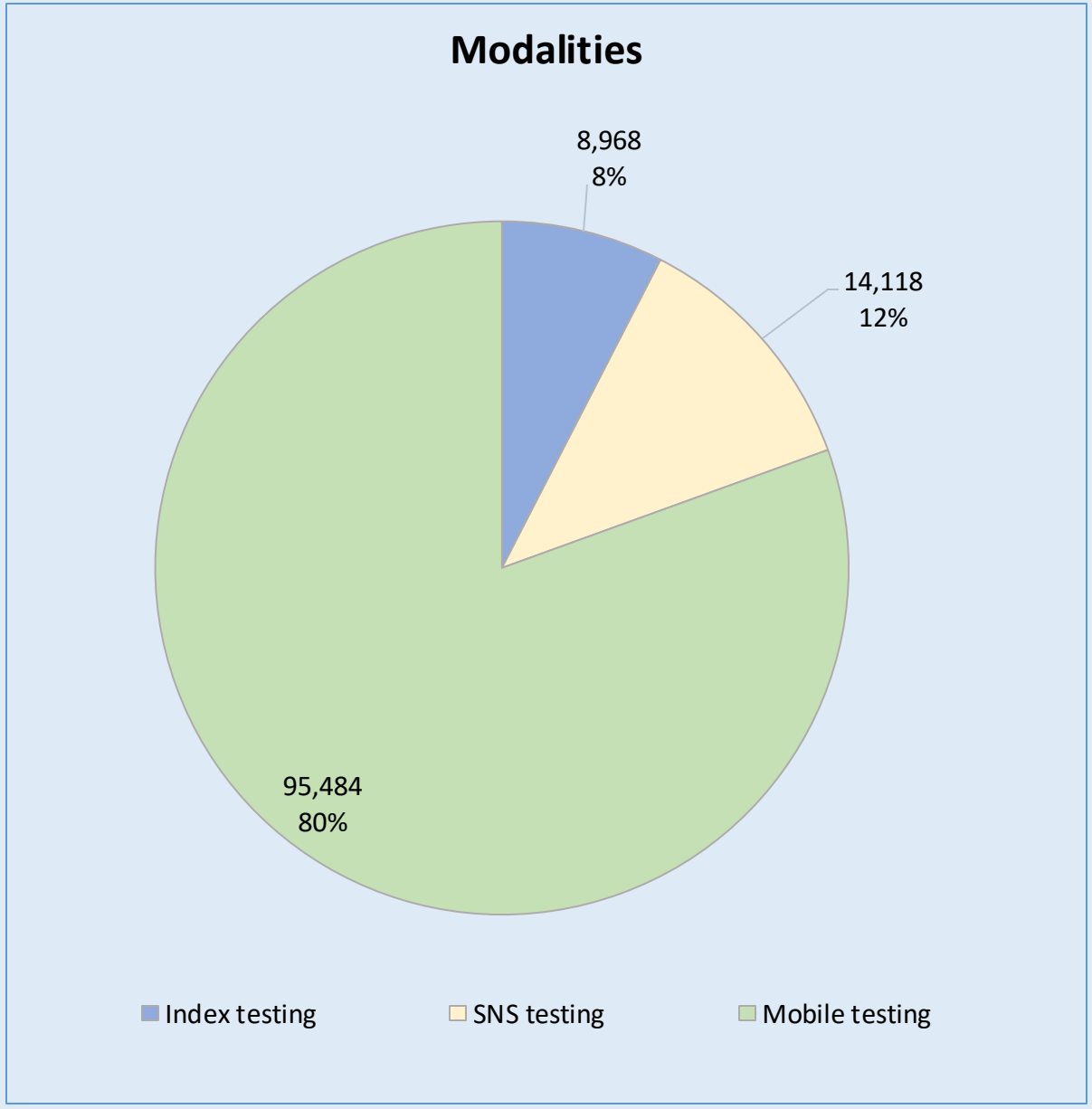
HIVST Cascade For All Individuals – Oct 2024 to June 2025 (Overall)

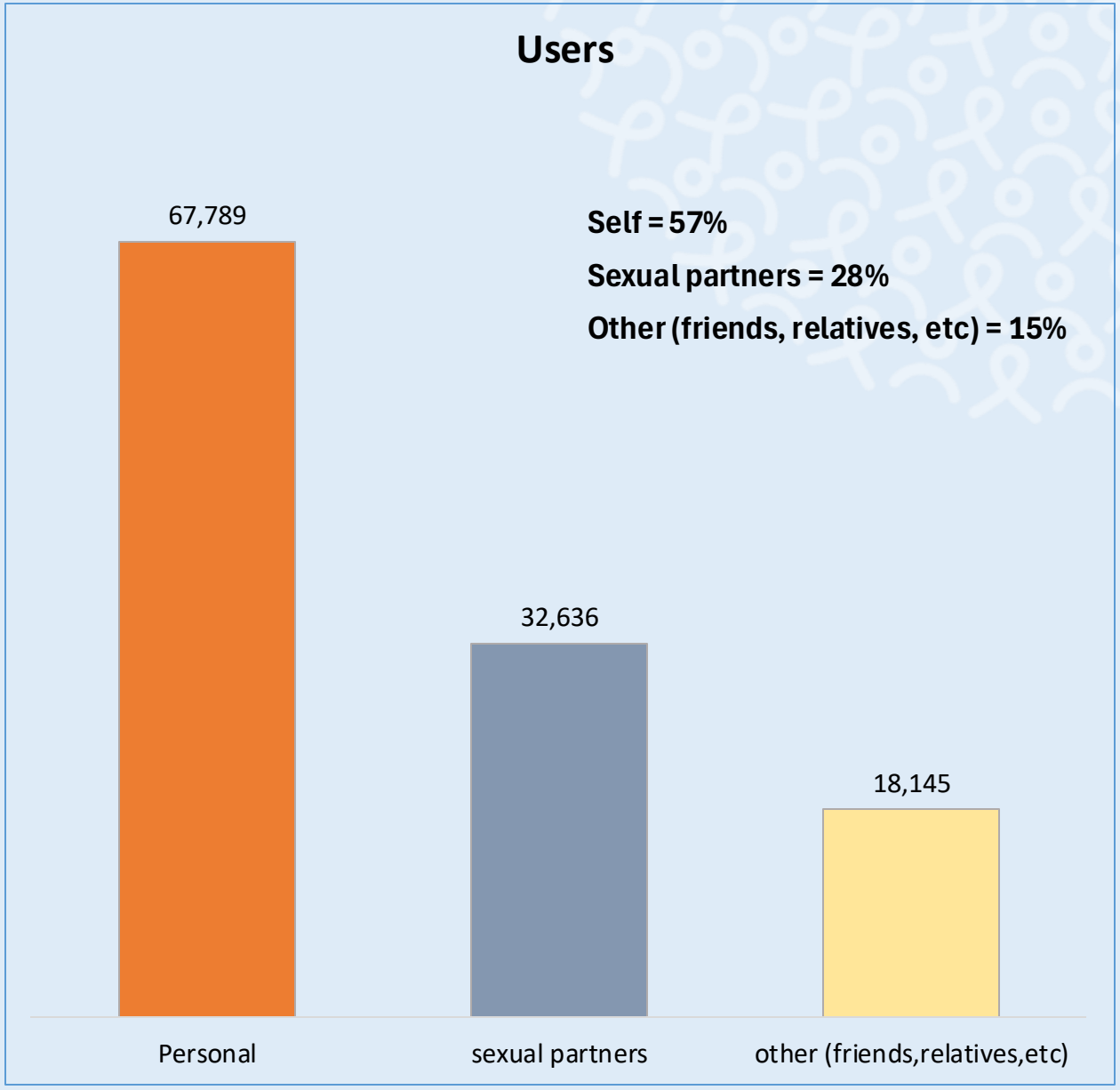


- **81.5** return rate
- **0.3%** reactive
- **98.1%** of confirmed reactive linked to ART.

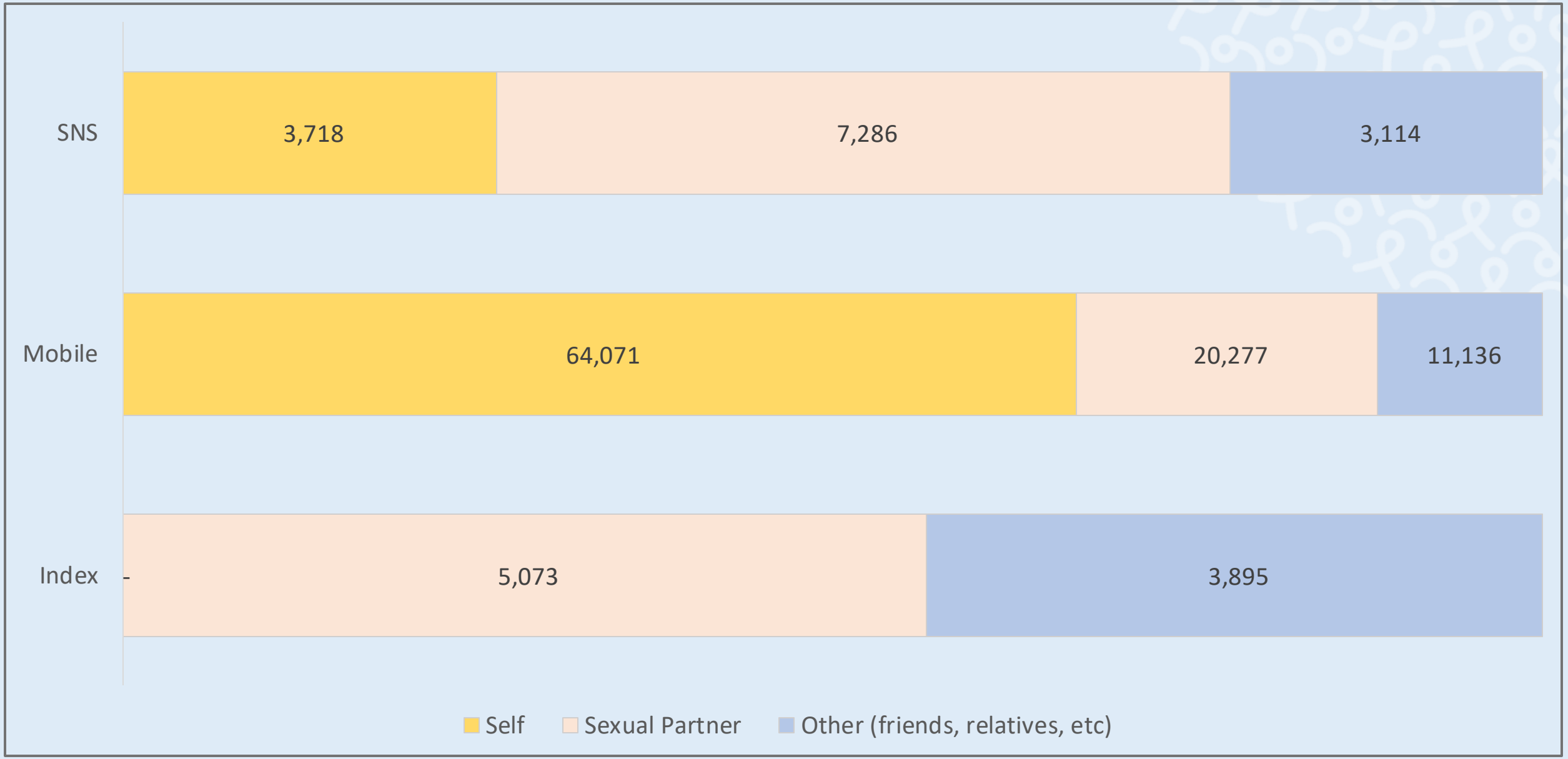
- Distributed **418,123** HIVST kits,
- **260,158** through primary & **157,965** via secondary distribution.
- **854** reactive HIVST kits, **780** confirmed & **766** linked to ART.
- Secondary distribution is also facilitated through the integration of HIVST during Index Testing & SNS.

HIVST kits Distribution - Oct 2024 – June 2025 (Results from selected regions)



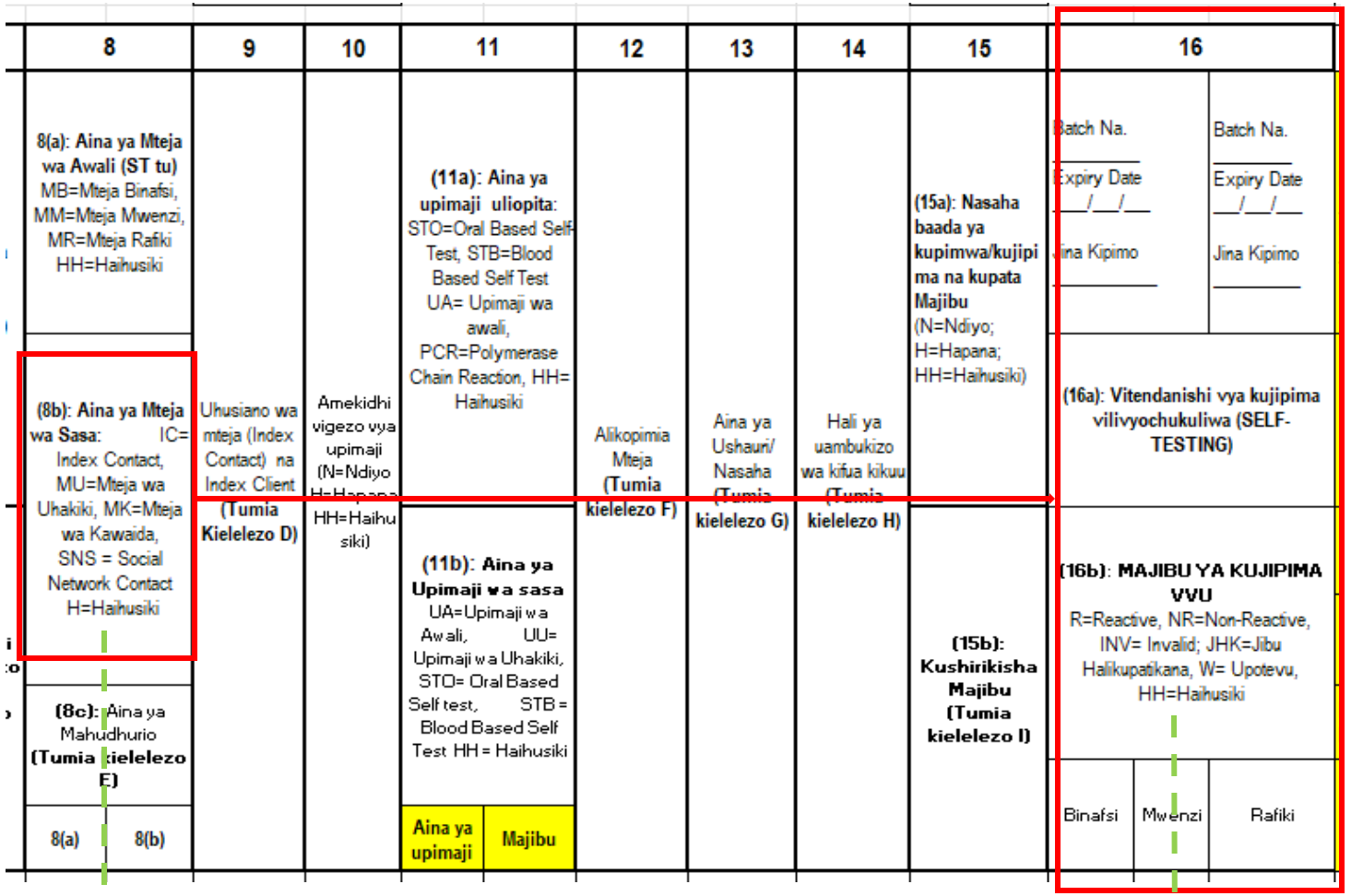


HIVST Distribution By Modality - Oct 2024 – June 2025 (selected regions)



Data Collection Tools & Reporting

- **HTS_SELF** is counted by the number of HIV self-test kits distributed.
- Number of self-test kits distributed, captured, & reported at the lowest distribution point.
- The main data collection tool is the National Integrated HTS Register
- The tool captures all approaches (assisted & unassisted), primary & secondary distributions.
  - ✓ The project's HTS Provider Summary tool captures use, reactive, confirmation, & ART linkage.



Information on testing approach

Information on HIVST kits distributed to who (self, peers, sexual partner

Lessons Learnt & Recommendations

Lessons Learnt

- Integrating HIVST into SNS increases the likelihood of reaching high-risk individuals.
- HIVST increases HTS uptake for the general population, at-risk adults, & expands reach to the underserved population.
- In Index Testing, HIVST provides clients with the autonomy to choose their preferred methods of testing & result notification.

Recommendations

- Promote the integration of HIVST into SNS & Index Testing modalities, & advocate for its formal inclusion in the national HIVST framework to enhance targeted case finding.
- Leverage HIVST more strategically to reach peers and social contacts through SNS, enhancing coverage and case finding.

Stay Connected

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EpiC YouTube

EpiC Blog

EpiC is a global cooperative agreement dedicated to achieving and maintaining HIV epidemic control. It is led by FHI 360 with core partners Right to Care, Palladium, and Population Services International (PSI).

HBV EMTCT PARTNERSHIP PROJECT IN NASARAWA STATE

Presented by: **Dr. Akpan Nseabasi A**
State Viral Hepatitis Program Officer
Nasarawa State Ministry of Health

OUTLINE

Overview of CFID Project

Activities implemented

Scope of the Project in Nasarawa State

- Update on HBV EMTCT and target Population reached
- Update on relink to care and targets reached

Data reporting rate on NDARS

Success Stories

Challenges

Recommendation

OVERVIEW OF CFID

- CFID is a patient led, research focused non government organization registered in June, 2013
- The organization was founded by the Executive Director and the immediate past president of the World Hepatitis Alliance, Prince Danjuma K. Adda
- CFID is implementing the largest facility based HBV EMTCT and partner testing in across 10 states in Nigeria

OVERVIEW OF CFID PROJECT

Center for initiative and development (CFID) implemented HBV EMTCT targeting 10,500 pregnant women attending ANC during their first visits, and partners/household contacts of pregnant women.

The Initial implementing facilities includes- Federal University Teaching Hospital Lafia (formerly called DASH), General Hospital Doma, GH Wamba and GH Nasarawa Eggon

The added facilities are- PHC Akunza, GH Obi, CPHC Kwandare and MCHC Shabu

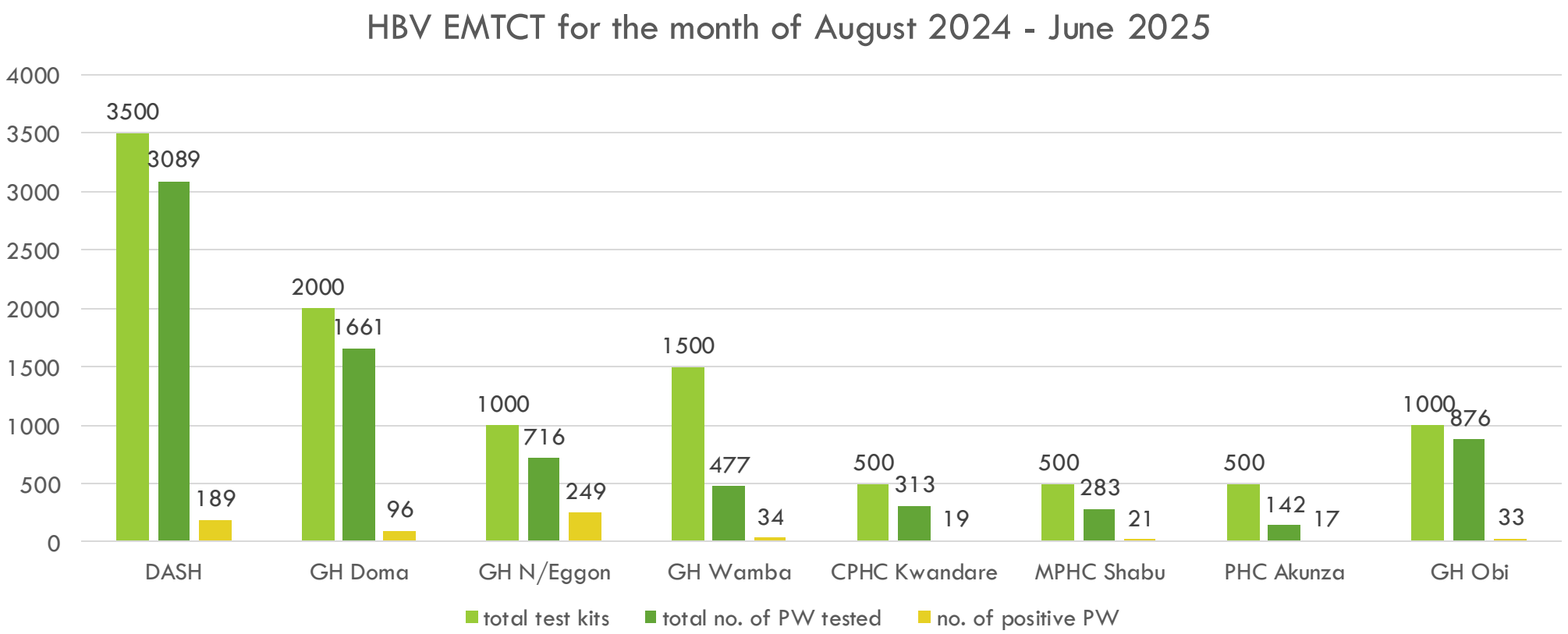
ACTIVITIES IMPLEMENTED

HBV EMTCT among pregnant women attending ANC in selected facilities.

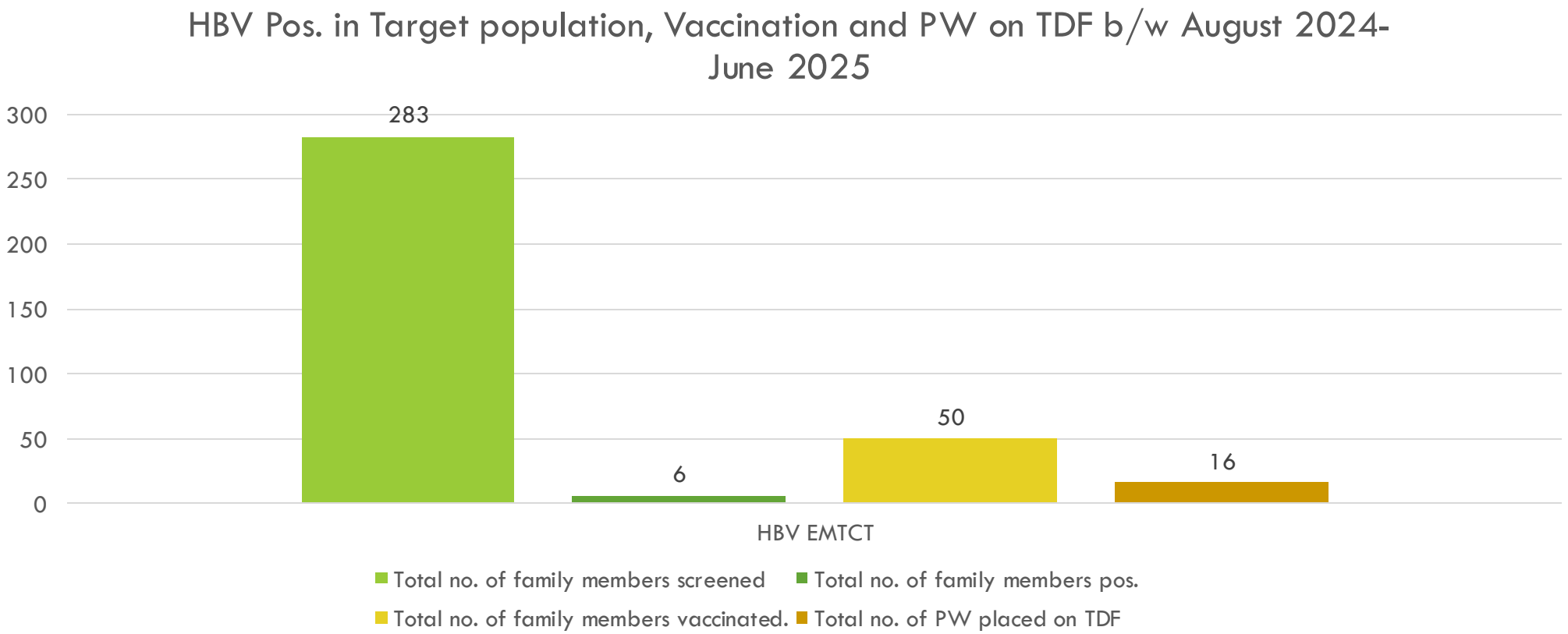
Testing of partners and household contacts of pregnant women

HBV and HCV relink to care in selected facilities i.e Teaching Hospital Lafia and GH Doma.

SCOPE OF PROJECT IN NASARAWA STATE



SCOPE OF PROJECT IN NASARAWA STATE



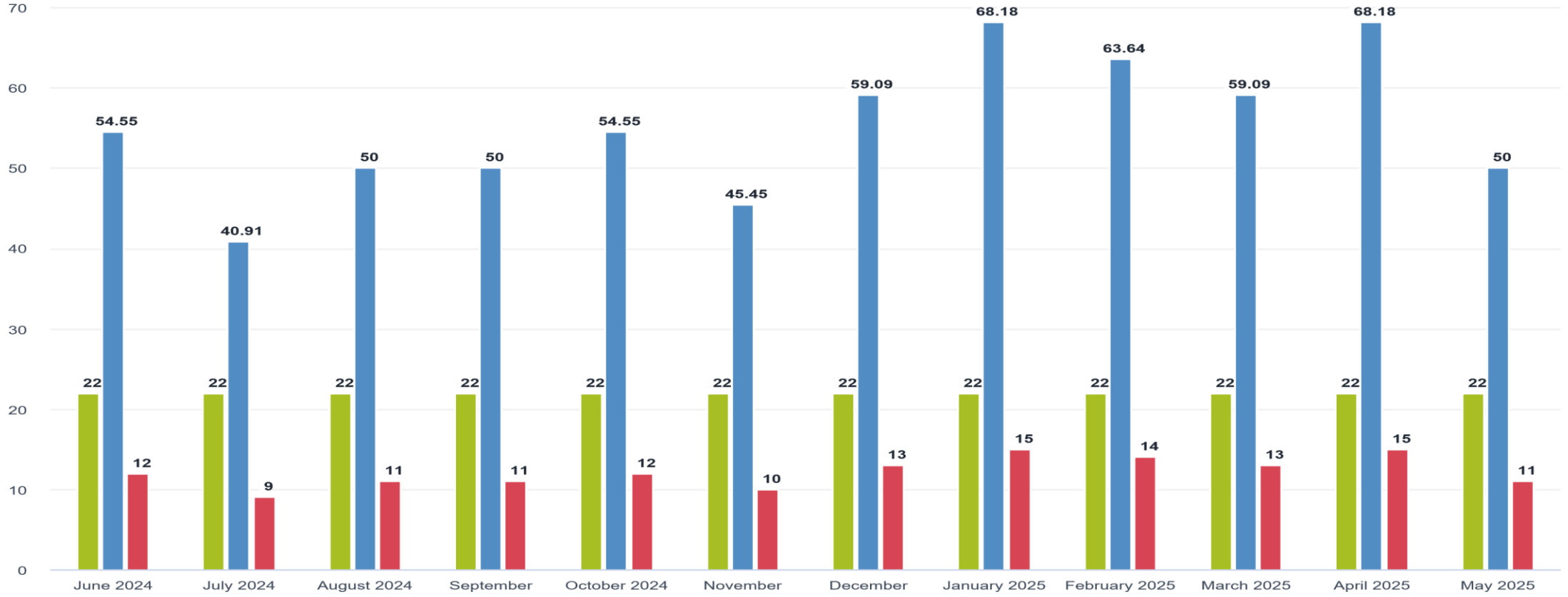
UPDATE ON RELINK TO CARE AND TARGETS REACHED

The relink to care is conducted in Federal University Teaching Hospital Lafia (formerly DASH) and GH Doma

Clients diagnosed with HBV or HCV in the past 2 years are relinked to care leveraging on the state existing structure viral hepatitis management

The total of 22 have been relinked to care and 10 clients are already on TDF treatment

DATA REPORTING ON NDARS FOR JUNE 2024- MAY 2025



Viral Hepatitis MSF – Expected Reports

Viral Hepatitis MSF- Reporting Rate

Viral Hepatitis MSF- Actual Reports

SUCCESS STORIES

- The State Government supported some pregnant women with TDF using the new WHO guideline , where women were administered TDF prophylaxis with HBSAg
- The State Government, as a drive to ensure sustainability has procured additional vaccines and RDT to support the Screening and HBV Vaccination among household of positive pregnant women
- A few pregnant women between 26 to 30 weeks GA benefited from TDF

CHALLENGES

- Most facilities have low number of pregnant women coming in for booking visits
- Majority of the family members to pregnant women who tested positive to HBV declined getting screened and vaccinated
- The initial 4 facilities had low utilization rate of test kits due to ANC attendance and strikes
- Lack of adequate drugs for family members that tested positive to HBV and TDF for positive pregnant mothers

RECOMMENDATION

- **For CFID**
  - To support in management of positive pregnant and their positive spouse and clients enrolled in the relink to care
- **For the State**
  - Create awareness on HBV vaccination to every negative household of pregnant women attending ANC through community engagement and key stakeholders by the State Health promotion Unit and Viral Hepatitis Desk Officer
  - To approve and release funds to support viral hepatitis program among pregnant women

THANK YOU

Q&A Session

World Health Organization

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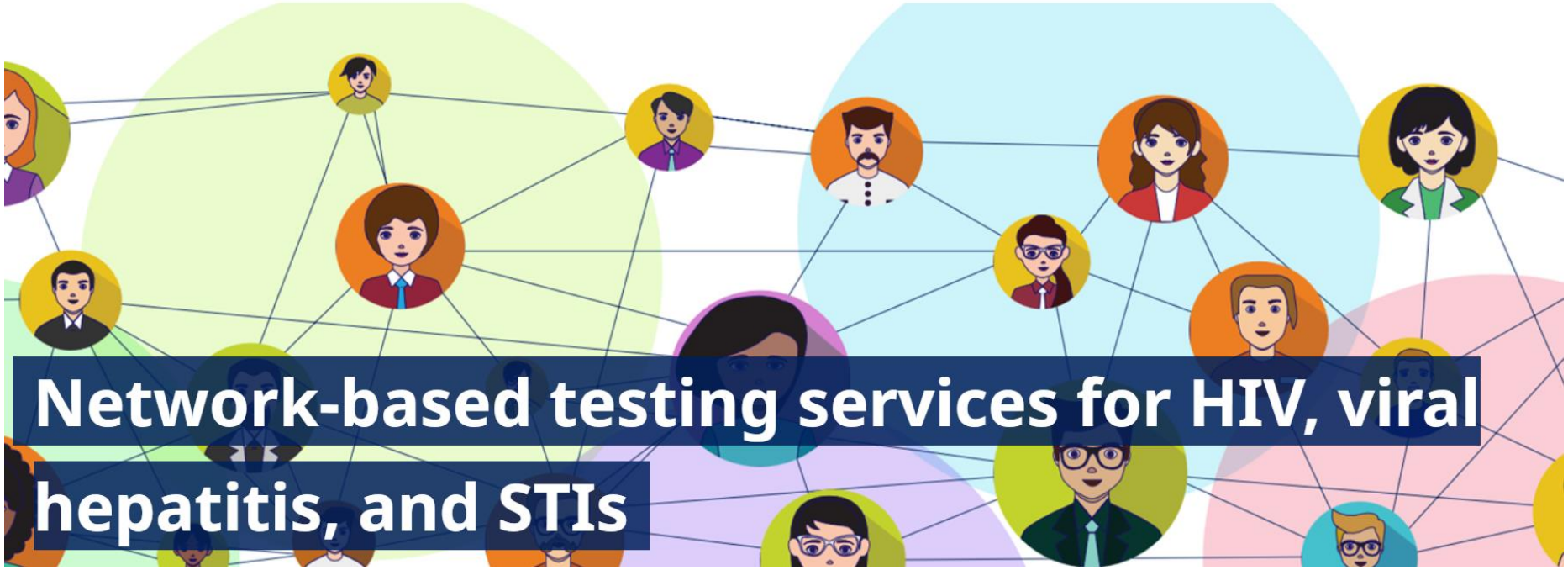

https://www.who.int/tools/network-based-testing-services-toolkit-for-hiv-hepatitis-and-stis

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